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ORIGINAL DEPARTMENT.

LECTURE.

KOCH AND PASTEUR.

BY PROF. M. DU CAZAL,
Of the Paris Faculty.

GENTLEMEN: In the collection of works published by the German Imperial Sanitary Bureau, in 1881, the researches and discoveries of M. Pasteur were attacked by Koch and his pupils.

Profiting by the occasion offered by the International Medical Congress at Geneva, the French savant replied to these attacks in a communication read before the Congress on September 8, challenging Koch, who was present, to refute his arguments.

M. Koch excused himself, and replied later in a memoir entitled: "On Malignant Charbon Vaccination," which has been reproduced by M. Ricklin in the *Semaine Medicale*.

The *Revue Scientifique* for January 20, 1883, printed a copy of this article, followed by M. Pasteur's reply.

The importance of this polemic and of the questions it raises, merits very careful consideration.

The haughty and aggressive tone assumed in Prof. Koch's memoir is in strange contrast with the wording of M. Pasteur's communication to the Geneva Congress: "Permit me," said he, "to select among those who have opposed my views, the one whose personal ability adds most importance to his opinions; I refer to M. Koch, of Berlin." And again, later on: "In a congress, a universal spirit of conciliation should be the rule; all discussion being courteous, showing the

participants to be animated by high aims, the search of progress, and verity." This appeal for courtesy has, it must be said, received very little attention.

Koch attacks primarily the general method followed by M. Pasteur, which, he says, has many defects: "At the period of his researches on malignant charbon, M. Pasteur found much already prepared. The bacillus of charbon was already known, and the proof that it was the primary cause of the disease had been already furnished."

Of these two assertions, the first alone is true; it was known that in charbon there existed a species of bacteride: but the rigorous, scientific proof that it was the cause and not the effect of the malady, had not been made. If the Comptes-Rendus of the Academie de Medecine for that period are carefully examined, it will be found that when Pasteur laid the proof of this assertion before that body, not only it was felt to be perfectly unprecedented, but many of the members were little prepared to accept such a conclusion. How much eloquence was brought forth by Pasteur to establish the value of his method of successive cultures in vitro outside of the economy, and to convince his adversaries that this twentieth or thirtieth liquid of culture, with which he communicated the charbon disease, no longer contained any of the actual virus and could only contain the bacteride, capable of infinite reproduction, and consequently the primary cause of the disease itself.

Then passing to the works of Pasteur on the saliva of rabies, Koch addresses two reproaches to the French savant: first, that he was ignorant of the

fact that the microbe found in the saliva of the child who died of rabies at the Hospital Ste. Eugénie, may be also found in the saliva of persons in good health; secondly, that he was wrong in believing that he communicated a new disease to rabbits inoculated with this virus, for the malady developed was simply septicæmia, already investigated by Coze and Feltz, and later on by Davaine.

Koch, later on, asserts that Pasteur is mistaken in thinking that he communicates a new disease, with the microbe discovered by him in the nasal mucous secretion of a horse with the typhoid fever, for this again is simply septicæmia.

As regards the second point, Pasteur distinctly affirms that the microbe in question develops in the rabbit a new disease, differing from septicæmia and differing widely also from the malady developed by the inoculation of the secretion of the nasal mucous membrane of a horse dead of typhoid fever. He offers to inform Koch on this point, as also on others raised in this discussion, before a commission to be chosen by Koch himself.

On the first point we have already established, in another work (Du Cazal and Zuber, *Du Role Pathogenique des Microbes*) that examination of the *Comptes-Rendus* of the *Académie des Sciences* show that not only Pasteur was aware that the microbe (rabie) in question could be found in the saliva of a person in good health, but also that he was the first to announce the fact to the learned assembly, before Vulpian, and consequently before Sternberg.

"Even admitting," continues Koch, "that inoculation of the nasal secretions of the horse develops in the rabbit an infectious disease, differing from other infectious diseases developed experimentally, I should consider this result of secondary signification, and not of sufficient importance to be communicated as a discovery before an International Congress."

The fact is, that Pasteur mentioned this experiment at the Geneva Congress only in referring to his general method of attenuation of the various varieties of virus; he spoke of the microbe of the saliva (rabie) and of that found in the nasal secretions of the horse, only as examples of this method of attenuation.

Koch is again mistaken when he asserts that Pasteur seeks to assimilate typhoid fever of the horse with that observed in the human subject. He asserts that the microbe kills the rabbit by inducing typhoid fever, and this hardy assertion would seem to have some foundation in the anatomical lesions found after death.

But this is very far from saying that the malady resembles typhoid fever as found in the human subject. Is not Koch, on the other hand, rather daring when he asserts that this disease which kills the rabbit in twenty-four hours cannot be typhoid fever, for he is unacquainted with any form of the disease which destroys its victim in so short a space of time?

It is true this malady never proceeds with such rapidity in the human subject; but what do we know of its course in the rabbit?

Later on, Koch again asserts his claim to the discovery of the spores of the charbon bacteride. Koch was incontestably the first to observe the transformation of the charbon bacteride in spores, and this important discovery cleared up many points which up to that period had remained obscure in the etiology of malignant charbon.

But it is none the less true that seven years previously, in his studies on the disease of silkworms, called *flacherie*, Pasteur indicated and sketched out the formation of spores in the pathogenic filaments of this disease, and demonstrated that these spores may become regenerated several years after their formation. This precedent served to lead the way for Koch's discovery, without diminishing in any degree its importance.

Koch again returns to the famous experiment of the artificially-chilled hen (*poule refroidie*) which contracts charbon. The fact itself is not denied, and cannot be; but its interpretation is contested, and in the opinion of the learned Berlin physician, it is not because the hen is chilled, that it is rendered apt to contract charbon; but when the animal is thus nailed on a board and plunged into cold water, the effect on its vital conditions is of such gravity, and the perturbations developed in its system are so intense, that they alone would account for the susceptibility to the action of the virus, without calling up the state of refrigeration as the only cause.

But why invoke these presumed perturbations? Nailed or not, the hen contracts charbon only in a chilled condition. And Koch should have considered the entire experiment as reported in the memoir. He would have learned that if the hen, although already affected and invaded by the micro-organisms, be removed from the water and allowed to become warm, though the other conditions of the experiment remain the same, the animal will recover, and the bacterides disappear from the organism.

The change in temperature alone causes the disappearance of the micro-organisms; and as Pasteur remarks: "It would be extremely satisfac-

tory if all physiological facts were established on equally solid proofs."

Is it necessary also to reconsider the question of the earth-worms, to whom Koch denies the rôle attributed to them by Pasteur, of transporting the infectious charbon germs from deep down in the earth to the surface? We do not consider it necessary, as the recent discussion on the subject in the Académie de Médecine and the report of a commission, appointed to investigate, the truth of his assertions, confirming their exactitude, are yet too fresh to require repetition.

The discussion and report seem to have no effect on the opinions of Koch, whose objections prove but one fact, that the earth-worms do not suffice to explain all the facts in question.

Koch finally arrives at the grand question of the attenuation of the charbon virus, affirming that the honor of its discovery is due to M. Toussaint, and not to Pasteur. And yet he accords that anteriorly M. Pasteur had practiced the artificial attenuation, under the influence of oxygen, of the virus of hen cholera, and that already, after his first researches on attenuated hen cholera, "he had undertaken most important and interesting experiments."

It is certain that, as regards charbon, M. Toussaint made known, before Pasteur, a means of attenuating charbon virus by exposing the infected blood to a certain temperature ($56^{\circ}\text{C}.$) for ten minutes.

But there was no precision in this method; it might almost be said to be an accident of preparation. Here is the proof: Toussaint thought he destroyed by this means all the bacterides contained in the infected blood; this was an error. The bacterides are not even always destroyed when the blood is submitted to the influence of this temperature for a period of thirty minutes. It was on this account that the savant of Toulouse lost by his vaccinations a variable proportion of the animals inoculated.

It is none the less true, that those who recovered, remained thenceforth refractory to the action of the charbon virus.

The discovery of M. Pasteur, as M. Koch himself admits, is of a different nature. He applied to the study of malignant charbon the same method he had applied in his researches on hen cholera, and discovered a means of treating the virus which may become generalized, in submitting it to the action of oxygen.

By this method may be obtained virus in different degrees of attenuation, and a capital point experience proves, that each one of these states of

attenuated virulence may, conserving its degree of attenuation, be reproduced by culture.

This process, we repeat, has the immense advantage of being a sure, rigorously scientific method, giving always the same results when the experiment is conducted under similar conditions.

This last rule, that to obtain identical results from an experiment it is necessary that it be conducted under exactly identical conditions, appears to be absolutely ignored by the Berlin savant. What should be said of the value of an experiment where he vaccinates mice and guinea-pigs with a charon virus, attenuated sufficiently for the vaccination of sheep? Koch was astonished that they all died of malignant charbon, but it would have been even more astonishing if they had survived.

To follow such a method is to cast aside the primary principles regarding attenuation of virus, a method which allows a proper proportion of attenuation in comparison with the size and vital resistance of the animal to be inoculated.

Koch finally insists at length on the light value which possesses in his opinion the number of animals vaccinated; what is necessary to decide on the value of the method, "is not to know the number, relatively considerable, of animals vaccinated without bad results, but to learn if the preventive inoculation has accomplished its purpose, and the animals have really acquired an immunity from the scourge. On which question Pasteur does not inform us."

But it is not in Pasteur's province to satisfy Koch on this point. If he were to do so, he would be accused of deciding his own case to suit his own views.

The proof required is furnished by M. Boutet in his report to the Société Vétérinaire et Agricole de Chartres. According to his report, in the department of Eure-et-Loire, among the flocks of sheep which were partly vaccinated, the loss among the vaccinated during the year was $\frac{1}{10}$ of 1 per cent. and among the unvaccinated $3\frac{2}{10}$ per cent.

We have not been able to follow very closely the arguments brought forward by Koch, nor the replies of M. Pasteur to each one of the objections made by his adversary; but the following passage from the memoir of the latter will serve to characterize the strange position assumed by M. Koch in this discussion.

"Allow me," writes M. Pasteur, "a short digression. When I refer back, as I do at present, to the researches which occupied my attention from 1856 to 1876—a long space of life before you were born to the scientific world, since your first

work dates from 1876—I find that my unique pre-occupation during this long period was to keep alive microbes in a pure state in appropriate liquids of culture. After all this period of research and labor, is it not astonishing that you lightly accuse me of not knowing how to make pure cultures?"

It is in fact a strange spectacle, implicating a singular forgetfulness of the history of scientific progress—this reproach addressed by a savant of the special competence of M. Koch, to the inventor of this very method of culture of disease germs, which our illustrious compatriot first discovered and utilized in the long and glorious series of his experiments.

COMMUNICATIONS.

GLIMPSSES OF SEVENTEENTH CENTURY MEDICINE AND MEDICAL MEN.

BY E. T. BLACKWELL, M. D.

Paterson, N. J.

There is a class of people who deery the present age as compared with the past, and sigh for "the good old times" when civilization and literature and art were believed to have reached the zenith. Whatever there may be of truth in this, as it regards excellence in the fine arts, architecture and eloquence, it cannot be gainsaid that Medicine prior to the discovery of Harvey had little claims to be called a science; so little was then known of Anatomy, Chemistry or *Materia-medica*, and so fanciful and false were the notions of physiology and the etiology of disease. Reference is made in Ziemssen's *Cyclopædia of the Practice of Medicine* to Sylvius, who occupied a most conspicuous position as a leader and teacher of the medical art in the latter part of the seventeenth century, as the first author who had mentioned tubercle as a factor in disease. A fragment of his work on the practice of medicine, published a little over two centuries ago, is now before me: and, as it furnishes a pretty clear exposition of what was then known of the human organism, its diseases and their remedies; and reveals the status of professional feeling and practice, as well as the attitude of the people toward practitioners, and their methods of advancing their knowledge of their art, I judge that some material derived therefrom will interest the reader. So quaint is the style of this book: so incisive and caustic the personal reflections; so simple and hum-drum the expression; so theoretic, and as now believed

false, the most of the etiology; so uncommon and worthless, not to say disgusting, many of the remedies, the reader will relish, I think, rather copious extracts. The title-page here given is full of suggestions:

A
NEW IDEA
OF THE
Practice of Physic;
Written by that Famous
FRANCISCUS DE LE BOE, SYLVIVS;
Late Chief Professor of Physic in the
University of *Leiden*.
THE FIRST BOOK;
of the Diseases either constituting, producing,
or following the Natural Functions
of Man not in Health.
Wherein is contained, beside a New Method
in general, a Vindication of the *Spleen* and
Mother from Fits attributed to them.
As also a new Discovery of Intermittent Fevers,
the *Yellow Jaundice*, and other Diseases,
never before discovered.
All cleared by Anatomical Experiments and
Chymical Demonstrations; as also
by their Cures.
Where to is prefixed a Preface written by
Dr. Mar. Nedham.
Translated faithfully by RICHARD GOWER,
formerly Student under the Author.
LONDON. Printed for *Brabazon Aylmer*, at
the Three Pigeons in *Cornhill*, 1675.

The dedication, here given, seems to lack nothing in the way of comprehensiveness:

"To all the Supreme Powers in Christian Europe, FRANCISCUS DE LE BOE, SYLVIVS, Physician, wishes Perfect Health of Body and Mind, and also faithful and quiet Peace, from God the giver of every good Gift."

The sub-dedication is to a like effect:

"To the Reader who is studious of Truth and Public Good, Franciscus De Le Boe, Sylvius, wishes Health." This is dated "Leiden, April 14, 1671."

The following notice suggests that literary piracy was well known before the advent of the present age:

To the Gentle Readers and Printers, the admonition of Franciscus De Le Boe, Sylvius: "I would have all admonisht, that I in no wise ac-

knowledge that edition for mine own which Thomas Matthias Gotzius publisht in the year 1664 under my name and of the Colleg of Practicall Physicians: nor that which I hear Frideric Leonardus hath publisht this year 1671 at Paris under the Title of my Practice: much less that infamous and foul Book, which some ill-employ'd busie-body wrote and publisht out of his own wicked Store and impure manners, a few years since, under the Title of the Second Part of Physicall Disputations concerning the Circulation of Seed and the Generation of Man, imitating my stile, whereby he might fasten it upon me, and thereby injure my Reputation."

The translator introduces the work of his "Quondam Tutor" by a dedication: "To the truly Honorable Robert Boyle, Esq."

Dr. Marchamont Nedham supplies a preface of twenty pages to the work, in which he indulges in very trenchant criticisms upon the author, upon medical study, charlatanry, chemical medicines, and the relative merit of Physicians and Chirurgeons, which may be as spicy reading at present as it must have been two hundred years ago. He thus discourses of the author: "He was by Birth a German, who through industry arrived to such degree of merit by working and practice at Amsterdam, that his Fame spreading about the Low Countries, the States of Holland cast an eye of great regard upon him, and placed him (though a Stranger) in the Professor's Chair in the University of Leiden; which he afterwards adorned for almost thirteen years, by forming many useful Doctrines (not merely formal points of Literature) for the Institution of young Beginners in Physick, of whom a multitude were by his Reputation drawn thither from all parts of Europe, to be his Disciples: such Doctrines as have not had their Rise from the Ancients, and the Academies, but most of them from Laboratories of his own and others, wrought out of the Fire for near forty years together, and confirmed by constant Practice among the Sick, in which work of Curing he excelled all his Fellows, in most difficult Cases: Yet because he had recourse mostly to Chymical Remedies, (of whose safety and excellency the World is now convinced) the more lazie Tribe of Doctors made it their business most maliciously to calumniate and traduce him, as you will find him miserably complaining in many parts of his Book: of whom he saith in 40th Chapter, that they be ignorant of most Natural Things yet are a prating Crew, that strut about and swell inani Doctorum Titule, with the vain Title of Doctors, and the World has too many of them; though they and their credit wear off apace."

The methods of getting forward professionally, and the ethics in vogue at the time of this publication, have a special interest in these days of sharp competition and heterodox ethical departures.

Dr. Nedham continues: "To say nothing of their Flatteries of the Great and the Rich, besides the Calumnies that they sow against other Practitioners, the frequentation of Clubs and Tipple to gain Acquaintance, and the glosing collusions and fine Tales with Nurses, Midwives, Women, and Weak People, the Confederacies to cry up one another with *Doctissimo* and *Clarissimo* in Prints, the creating & canvassing of Interests in Families, and the common *chequenerie* of Consultations only with Men of their own Tribe; the most remarkable Trick of all is, that they have an oar in the Boat of every Party round the Town and Nation, having lifted themselves accordingly. Some are for the Church of England; some for the Church of Rome; some for the Presbyterian; some for the Independent; some among the Baptised; some for the Fifth Monarchists; some for the Quakers; every man for himself, and God for all: And so the World is very luckily divided: every Party taking its own Proselyte to be the Ablest, and the most conscientious Doctor. Is not this a short cut (think ye) to get Custom? This and Scholastick Twaddle will do the Work, according to the general Mode of their Second Commencement; after which, the Men of no Party, whatever their Industry and Art be, are left to be turned to grass upon the cold common of Integrity."

This period was marked by great activity, and great discoveries in anatomy. Dissection was actively prosecuted, post-mortems were held and vivisection resorted to. That some extra-professional dust may have been raised by this process is possible, and its sinister aspect is thus recorded: "In this latter Age, the great pranks they play are by mounting the Stage of Anatomy, (for that pass 'tis now come to), where many of them are wont ever and anon to make wondrous ostentation of pretended new Discoveries in the little World of Man: with which they have a Mint always going, for coining new Hypotheses, out of which they start up their various Dogmaticisms, to amaze their Admirers, and amuse the World: so that the very Neighbors Dogs are in as much danger of their Shambles, as they are of the Falconers." Again, "'Tis a common trick among the Tribes of Dissectors, to open Bodies of their own or other Men's Patients, in pretence to satisfie themselves, and the deceased's Kindred touching the cause of Death: and thence they always pick out enough before the admiring By-standers, to justifie them-

selves and their own mistakes, by reasons to prove that the Patient was incurable; or else they will be sure to collect dirty matter enough, to cast upon any Physician whom they envy, whose hap it may have been to have given Physick before them to the same Patient; especially if he be not of their Honorary number: hundreds of able Practitioners and Learned, have been thus artificially blasted: So that it were well if this famous City of London would take Notice of such crafty Abuses for the future."

Warning his reader against the dangers of false conclusions drawn from post-mortem appearances, and the theories erected thereon, he says: "No Man can be against a due enquiry into Anatomy, so far as concerns being acquainted with the Structure, Figure, Scituation and Connexion of the Parts of the Body, especially in Cases of Chirurgery, wherein its greatest use doth lie: and of this also it becomes a Physician not to be ignorant, who ought also to be a Chirurgian: though the fine-finger'd Academick Education of Physicians in England, hath here unhappily divided the two Faculties, the Professors of the one being brought up to Talk, the other to Work; from whence 'tis observable, we are always furnished with far more able Chirurgians than Physicians. * * * Besides if our Chirurgians were excluded (as that's the desire and aim of the others) from the Practice of Physick, I wonder where his Majesty for his Fleets, and the Merchants for theirs, on which the Wealth and Glory of this Kingdom doth depend, would be supplied with Able Practitioners for the Sick at Sea, the greatest sicknesses, both Acute and Chronick, being there predominant. Not from the fine breed of the *Scholastick Family* whose Learning (so much as it is, and that is in but a very few of them) lies quite beside the way that leads to the more noble Family of Physicians; insomuch that when they first come to Town with the Learned *Cushion-cap* and *Scarlet* the very Apothecaries Boys are able to tutor them in Town-practice, laugh at them, and tell Tales behind their backs. * * * 'Tis to be hoped the Nation will ere long be convinced, that the Laboratory, the Work-house is the way to be traced before we enter the Library, an Apprenticeship from our Youth to work and study under a Practiser, is that only which can make one a Doctor."

Bewailing what he considers misdirection of study, he observes: "The *Materia Medica* lies too much neglected; the improvement whereof is the *one thing necessary*. They ought rather to employ themselves in the Anatomizing of all Natural Subjects, in order to the knowledge of their various

Virtues, by resolving and educing the several Parts and Principles of which they are composed, and in searching out their usefulness by reasoning upon the manner of those Operations by which they are prepared, and from thence calculating what uses they may be put to. * * * How comely would it be, to see them spend their time in making further enquiries into Herbs and Roots which contain innumerable other Virtues than are yet known. Had we not been more beholden to Women and Rusticks, than to the men of Literature, very little more had been known of them now than was a thousand years ago."

"What shall I say," he continues, "of those numerous Treasures lockt up in the Bodies of Stones, Earths, Minerals, Metals, and Salts, which require the Hands of all Mankind to unlock? It were to be wished they would but bestow part of their time and ingeny in reforming the old Doctrines and Notions in Physic, not in substituting new ones drawn from mere *Hypotheses Anatomical*, but from the good old real Principles of *Acre*, *Acidum*, *Salsum*, *Dulce*, *Amarum*, *Ponticum*, *Acerbum*, and *Inspidum*; wherein our *Sylvius* hath here pointed out part of the way, those things being by experience found to be the real principal disturbers of Humane Bodies. The accommodating of Physical Preparations to the qualifying of those when either of them is *peccant*, is the only way."

Dr. Nedham having also written a book, "entitled *Medele Medicina*," which had been sharply criticised by "some small Men of Note," whom he stigmatizes as "incompetent Adversaries," and "Whiffling Novices," who he asserts "were set on by their Fraternity to prepare discourses," against him: and who, whatever else they may have averred, he declares, "added their crafty insinuations that I had printed all Men to have the French Pox. * * * Nor was this all; but the Design was followed up and down by slander, that I had used dangerous Medicins in regard I had in that Book magnified the good Effects of Remedies Chymically prepared, and their safety if well made, and their force above all other, in Curation of the most pertinacious deplorable Diseases, of which I have lived to see the World, for the most part, so abundantly convinced, that the more ingenious sort of Mankind have concluded that he who is not well-skill'd in the use of those Remedies, is not worth the name of a Physician."

So determined were the opponents of "Remedies Chymically prepared" that they "were wont in the time of my youth when I first came to Practice exceedingly to decry, and noted with a black coal all those that used such Medicins."

His further defence throws considerable light upon the method of dispensing medicines at that time, and will have a living interest for the physician of to-day. "Some years ago," he says, "there was a more ready Opportunity to scandalise me, when my Matter of Medicine being prepared in my own House, was kept private to myself, and so my Adversaries might maliciously say of it what they would: Therefore, as soon as I found the *Company of Apothecaries* had erected a *Laboratory* at their Hall, for supply of their Shops with Medicins of all sorts, of the Chymical Preparation so that a Man might be sure, upon the Publick Stock and Credit of the *Company* to be served with them faithfully prepared, my Heart rose with pleasure to congratulate them in an undertaking so necessary for the Kingdom, it being the Main Matter wherein their Trade was deficient, because what Chymick Medicines were used before to make up the Physicians Prescript, were for the most part bought of *private Operators*; of whom we could have no Confidence for due Preparation, in comparison of what in reason we ought now to have; seeing the Security is grounded upon the Reputation of a Worthy Company of this Honorable City, who cannot be supposed to prevaricate for Profit; seeing what is done this way is by *Common Consent*, which being well managed, will conduce much more to Profit, Reputation and Interest, to each particular Man in his Shop, through the satisfaction which will arise to every Patient, by the benefit which is like to answer the expectations of each Family, from those Medicines rightly prepared. And so, from the time that I observed this, I have eased myself of the Toil I had taken upon me, and wholly referred Patients with Bills, to receive Medicins dispensed by the Apothecaries Hands."

Opposite page one, of the interesting book from which I have so freely quoted, is the following quaint memorandum: "Rob^t Tremills his booke, bought of Mr Sam^l Lorkwood for 12^s and paid him Jan^y 25th 1700, and then all accompts ballanct in his booke: witness is his boy Charles:" which is countersigned, "his boy Charles."

Another autograph is that of Forster Nostrand with this pathetic reminder, "When this you see, remember me." It is dated "Novem. 1st 1786." It has also autographs of Ebenezer Blackly and William Leddell, formerly prominent practitioners of medicine in this upper part of the State of New Jersey. Some account of the Anatomy, Pharmacy, Physiology, Etiology and Practice of Sylvius must be reserved for another paper.

HOSPITAL REPORTS.

THE TREATMENT OF INTERMITTENT FEVER. CATARRHAL INFLAMMATION AT THE APEX OF THE LEFT LUNG. FI- BROID PHTHISIS. PHTH- SIS FOLLOWING PNEUMONIA.

A CLINICAL LECTURE DELIVERED AT THE PENNSYLVANIA HOSPITAL, DECEMBER 20, 1882.

BY JAMES H. HUTCHISON, M. D.,

One of the Attending Physicians to the Pennsylvania Hospital, Physician to the Children's Hospital, Philadelphia, etc.

Reported by WILLIAM H. MORRISON, M. D.

GENTLEMEN: The first patient whom I shall bring before you is one that some of you have seen on a previous occasion. She has been living in the Susquehanna region of this State, and when admitted had for some time been suffering from chills and fever. She exhibited all the signs of marked anæmia—pale face, pale lips and tongue, blowing murmur at the base of the heart, on the left side, and a jugular souffle. These signs have, under proper treatment, all disappeared.

The treatment consisted in the beginning of the administration of quinine, sixteen grains being taken daily in divided doses, and so given that the whole amount was taken before the hour at which the chill usually occurred. This checked the chills; but we did not stop here. The treatment must be continued for some time. The trouble, especially with dispensary patients, is, that as soon as they are relieved they fail to take the medicine. There is in these cases of intermittent fever a marked disposition for the chill to recur in seven, fourteen, or twenty-one days, or some multiple of the week. It is therefore very important that the medicine should be continued for a week in full doses, and the recourse should be again had to it at the periods when the chill is especially likely to recur. This was done in the present case. Quinine was at first given in full doses, and has been continued in moderate amounts ever since.

While quinia arrests the chills, it is not sufficient in itself to improve the character of the blood. I therefore gave her iron in the form of the tincture of the chloride. I know of no better preparation. It may be given in much larger doses than are set down in the books. In anæmia and erysipelas, I frequently give thirty drops every three hours, without producing any bad effects. The only precautions which it is necessary to observe are to dilute it sufficiently, and to direct that it shall be taken through a tube, in order to prevent its acting upon the teeth. This medicine has another advantage over many of the other forms of iron, in that it is cheap.

The patient has entirely recovered, and I bring her before you simply to show the result of proper treatment in a bad case of intermittent fever.

Catarrhal Inflammation at the Apex of the Left Lung.

This young girl was admitted to the hospital on November 4. She has therefore been in the hos-

pital six weeks. Until I had made a careful examination of the lung, I found no positive indication of disease. Her temperature ranged between 98.5° and 100°. It has never gone above 100°. Careful percussion revealed a slight amount of dullness on the left side under the clavicle, and also above the spine of the scapula on the same side. Very deep inspiration developed a few dry crackling rales. The heart-sounds were also more distinctly heard under the left clavicle than they are in health. There was also some want of expansion. Taking all these symptoms into account, I diagnosed slight catarrh of the upper part of the lung, which may possibly degenerate into phthisis.

I at first placed this patient on Niemeyer's pill, which, as you know, contains quinia, digitalis, and opium. This was continued for some time. She has also received cod-liver oil and tonics. For the purpose of checking the night-sweats from which she suffered, atropia, in doses of one-sixtieth of a grain, was given; but as this had no effect, I have lately placed her upon ergotine, three grains being given in a pill at night, and repeated if necessary. Under this treatment, the symptom has slightly improved.

There were in this case symptoms which made me fear the supervention of phthisis, although I am not prepared to say that phthisis is now present. There have been no marked symptoms; she has not had high fever, nor has the pulse been frequent. The following are the only symptoms which have been present; slight dullness at the left apex increased by deep inspiration, increased vocal fremitus, increased distinctness of the sounds of the heart, all indicating that there is some solidification of the lung; but as these are slight, and the patient has, as far as we can make out, no predisposition to phthisis, we may hope that entire recovery will take place.

Fibroid Phthisis.

I shall next bring before you a patient who has been in the hospital for some time, and who, in certain respects, presents features of interest. The history is as follows:

M. A., white, age 45, has been engaged as a servant; she came to this country fourteen years ago; she has never had any children or miscarriages; her mother died when she was five months old; her father was always subject to asthma and "wind dropsy," and died at the age of sixty. She was well until six years ago, when she caught cold and contracted a cough, which is sometimes better and sometimes worse. The menses appeared at the age of fifteen, and have been regular ever since. Three years ago she suffered from dropsy, and at times during the last few years she has had frequent micturition. The urine has been frequently examined for albumen, but none has been found. The specific gravity of the urine is 1018. It is small in quantity and high colored. The dropsy from which she formerly suffered may have been due to either disease of the heart or disease of the kidney. I am disposed to attribute it to an acute affection of the kidney. For the past two and a half years, she has been quite sick. She has lost flesh, and has night sweats. The expectoration is not large in amount, but pretty free in the morning. She was admitted to the hospital on November 14, 1882.

Her temperature has been taken regularly since she has been in the ward, but it has never been more than half a degree above the normal. Since her admission there have been occasional night sweats. The pulse has been regular and only moderately frequent. On superficial examination there seems to be no active disease present at this time. When, however, we examine her carefully, we find marked evidence of disease existing at this time, and also the evidence of previous disease.

On inspecting the chest, it is clear that on the right side the infra-clavicular space is more depressed than on the left. There is also a less amount of movement during respiration on this side. It is sometimes difficult to appreciate slight variations in the amount of movement by the eye; in such cases, you should stand behind the patient and place a hand on each infra-clavicular space. Doing this, I find that the expansion is much more marked on the left side than on the right. The vocal fremitus is much greater under the right clavicle than under the left. The vocal fremitus is normally more distinct on the right than on the left side. The difference in this case is so great that I do not hesitate in saying that, for some reason, the right side is a better conductor of vocal vibrations than the left. The supra-clavicular space of the right side is also more depressed than that on the left.

In percussing this chest, I shall first use immediate percussion. I frequently find this to be the best means of developing dullness when its cause is slight or deep seated. On the right side percussion is dull, but when I strike hard, I bring out a note which has an amphoric character. This is due to the presence of a cavity. There is very little alteration of the percussion note when she holds her breath. As you observe, although the dullness is most marked at the upper part of the right chest, it also extends downward for some distance.

On auscultating the chest in this position I hear a marked blowing sound, which differs entirely from the normal vesicular murmur. It is present in both inspiration and expiration. Inspiration and expiration do not differ much in quality; if anything, expiration is a little softer and of lower pitch than inspiration. When the patient coughs, I hear gurgling. There is then evidence not merely of a cavity, or a dilated bronchial tube, but also of fluid in that cavity. If the cough is at all loud, the resonance transmitted to the ear is very marked. On speaking, the words are transmitted through the chest to the ear. I hear them more distinctly when the patient whispers. This is whispering pectoriloquy, and is of some importance in the diagnosis of a cavity. It is often present when sonorous pectoriloquy is not. This sound is I think best heard through the stethoscope. There are few occasions on which I prefer the stethoscope to the unaided ear. In auscultating the heart sounds, and in making a precise diagnosis of the valve affected, I prefer the stethoscope, and in searching for a cavity it is often of much service. These same signs are found posteriorly. At the base of the right lung there are a few mucous rales, and there is slight dullness on percussion.

There is another sign of some importance in

the diagnosis of this disease, i. e., dislocation of the trachea. In this patient, the trachea is almost behind the claviculo-sternal articulation. The heart in these cases is often displaced. This has not been determined in this patient.

Let me repeat the physical signs which are present in this case: slight flattening under the right clavicle, want of expansion, increased vocal fremitus and resonance, whispering pectoriloquy, cavernous respiration, and on coughing, crackling rales. The same signs are found posteriorly; at the base of the right lung, there is slight dullness and a few mucous rales. On the other side there is no evidence of disease. The respiratory murmur over the left lung is not the ordinary vesicular murmur, but is that which we have when the function of one lung is interfered with. In other words, we have puerile respiration. It has a broncho-vesicular character. Under these circumstances it is rather a sign of health than of disease, for it shows that the lung is attempting to do the work of the other lung.

This patient has never had any marked symptoms. She has never had high fever nor excessive frequency of the pulse. She has, however, a cough, which is not very constant, but which is accompanied in the morning by copious expectoration of purulent liquid. This she says is at times offensive. She also has night sweats.

Let us see if we can explain this condition. Looking back at her history, we find that she has for some time been subject to a cough, which is sometimes better and sometimes worse. We have, therefore, evidence of old disease of the lung. I think that her disease probably originated in a pneumonia which never underwent resolution. All pneumonias do not resolve. Some undergo caseous degeneration, forming a large proportion of the cases of phthisis. Others undergo what is known as fibroid degeneration. In such cases, there is the development of fibroid tissue, similar to that which takes place in cirrhosis of the liver and kidney. This condition is often called cirrhosis of the lung, but this is not a good name; for the word cirrhosis is derived from the Greek word for yellow, and although in cirrhosis of the liver the organ is yellow, the lungs are of this color in fibroid phthisis. Just as an excessive development of fibrous tissue causes a marked derangement of the functions of the liver and kidney, so in the case of the lung, a marked derangement is produced. When this fibrous tissue contracts, it pulls in all directions, and causes dilatation of the bronchial tubes. This accounts for the large amount of expectoration. It is impossible in this case to say positively whether there is only dilatation of a bronchial tube, or whether there is in addition an excavation. My opinion is that there is only an enlarged bronchus. One reason for this opinion is that there is no symptom of hectic fever. If there were a large excavation, we should expect a high degree of fever at night, and sweats. The fact that the expectoration is purulent and sometimes offensive, is rather in favor of an enlarged bronchial tube, at the apex of the right lung. There is also evidence of enlargement elsewhere. I therefore regard this as a case of enlarged bronchial tube accompanying fibroid phthisis, and resulting from chronic pneumonia.

In these cases it is important to keep up the strength. Nutrient remedies, cod-liver oil and tonics, should be given. We have given her these, and as she suffers a little from cough, I have put her upon the use of the following prescription;

R. Acidi sulphurici dil.,
Tinct. opii deodoratæ, aa gtt. iij.
Syr. pruni virginianæ,
Elixir. cinchonæ, aa ʒ ss. Misce.

Signa.

You will find this preparation very efficacious in the cough of phthisis. It is not necessary to give nauseants. I give but a small amount of opium in this prescription, in order to avoid the production of nausea.

In regard to local treatment, are we able to do much by means of inhalations? Local treatment would, I think, result in failure, and might interfere with other remedies. If the expectoration were very offensive, I should resort to some inhalation to correct this. Turpentine is useful for this purpose. The internal administration of turpentine is also at times of service. There has, however, been no marked indication for these remedies, and they therefore have not been used.

Phthisis Following Pneumonia.

This patient is 36 years of age. She was admitted on November 22, 1882. She has had three children; one of these died at birth, and another has died from disease. This rather indicates a scrofulous tendency. The family history is negative. There appears to be no predisposition to phthisis. She has had pneumonia twice; the first time eight years ago, the second time during last June. This is all the history that we have been able to procure.

An examination of the temperature record will show you that the temperature has differed from that of the previous case. When first admitted, the temperature was above normal. Under proper treatment and rest it has diminished, and for some time it has not been more than one-half to two-fifths of a degree above normal. The patient presents the appearance of a person out of health, and a certain amount of anæmia. The face, although usually pale, is at times flushed; sometimes one cheek only is flushed. This shows a certain amount of vaso-motor paralysis. The tongue is oedematous, and shows the marks of the teeth. The pulse is at present frequent, but at times it is not much above the normal.

On percussing the chest, I find some dullness under both clavicles. The percussion seems to produce irritation, causing a cough. In striking the chest, I appreciate a sign which was marked in the other case, but to which I neglected to allude. It is one which the percussor alone can appreciate, i. e., a feeling of increased resistance. Under the clavicles, there is increased resistance, the sound produced is of short duration, high pitch, and deficient in resonance. There is no increased resonance on deep inspiration, showing that the lung does not expand well.

Auscultation reveals harsh respiration of a blowing character, accompanied by numerous rales. The cardiac sounds are transmitted to the ear with increased intensity. The same signs exist on the right side, but are not as marked as

on the left. The vocal resonance is also increased. (The patient was now removed.)

As I cannot in this instance give a very hopeful prognosis, I prefer to speak in the absence of the patient. We have found slight dullness on percussion under both clavicles, increased by full inspiration, increased vocal fremitus and resonance. In addition to these, there are blowing sounds and crackling rales. These indicate not only that there is induration, but also that softening is taking place. We have also a history of two attacks of pneumonia—one several years ago, and the other within the past year. I want at this time to call attention to the fact that there is a form of pneumonia which is apt to degenerate into phthisis. I know that high authorities, as, for instance, Professor Flint, think that phthisis rarely, if ever, results from pneumonia. My experience has led me to form a different conclusion, and to agree with those equally high as authorities, who say that phthisis is often preceded by pneumonia.

The treatment has of course differed somewhat from that of the previous case. On admission, there was fever, temperature of 101°, and frequent pulse. She was placed on the use of Niemeyer's pill, every three hours. Under this treatment the temperature fell, the pulse diminished in frequency, and the other symptoms improved. I then placed her on cod-liver oil, but this disagreed with her, occasioning sickness of stomach. In such cases it will do more harm than good to continue its use. She was then given malt, which she has used with great advantage during the past few weeks. In addition, she has had other remedies, which were prescribed as occasion required. At present, she is taking nothing but malt. She has no cough. There is then no necessity for prescribing the mild cough medicine used in the preceding case. She eats well, sleeps well, and all the symptoms are improving, and I think that in a short time I shall be able to show her to you still more improved. Unfortunately, her condition is such that if she left the hospital and attempted to work, the active symptoms would undoubtedly be reproduced. It will be necessary during the winter to have her in the hospital, or secure her a home where she will be free from work.

MEDICAL SOCIETIES.

ALLEGHENY COUNTY MEDICAL SOCIETY.

The Allegheny County Medical Society met in Common Council Chamber, Pittsburgh, March 20, 1882.

President, Dr. John H. Thomas, in the chair.

Dr. G. B. Fundenberg, from the Committee on *Health and Disease*, presented a written report, devoted mainly to typhoid fever. He reaffirmed the opinion held by most medical men, that the fever germ must pre-exist, and also maintains its identity; that external conditions cannot originate the poison.

The Doctor thinks we can prevent 19 out of every 20 cases. The public must be taught the cause.

There are two avenues by which the poison enters the system,

1. By the air we breathe.
2. By the water we drink.

Bad cases often occur at an elevation of 2,200 feet, as in Somerset county, where the Doctor formerly practiced.

In the country and small towns the wells are generally close to the kitchen, and are often badly contaminated by slops, a shallow privy well close at hand, probably a pig-pen, and possibly a manure-pile. An odor arises from all this, and an infection is being continually breathed.

In Pittsburgh, opinion among medical men is divided as to source of the disease; some maintaining that it resides in the water we drink, and predicting a higher rate of mortality from this cause upon the completion of the Davis Island dam. He thinks in Pittsburgh we can generally find the cause in bad plumbing or a contiguous filthy cesspool.

Dr. Hoffman, from the same committee, presented an article on Pertussis, with reference entirely to his method of treatment. His method of treatment is to vaccinate the patient as soon as the disease is well established. As the vaccination develops, the whoop diminishes. He has been pursuing this course for twelve years, with invariably good results. He thinks it will diminish the intensity of the disease in every instance. He has no theory of its mode of action.

Dr. Sutton mentioned that vaccination in pertussis was the method always pursued by the late Dr. Dale, of Allegheny.

Dr. Fundenberg could offer no theory for the mode of action, unless it was the well-known antagonism of germs.

Dr. Batten related a case of Breech Presentation in a Primipara, the coccyx to right acetabulum. Has several times been deceived in breech presentation before the os was well dilated. Thought at first this was head presentation. In this case he delivered mainly by traction, there being no pain. Used finger in point of hip at first, afterwards by tape. Child was born alive.

Dr. James McCann presented for inspection a pathological specimen consisting of a portion of the popliteal artery found above the point where torsion had been made in connection with amputation of the limb, showing formation of clot.

The patient, 40 years of age, was admitted to West Penn Hospital with several injuries, the most important being a lacerated wound of leg, rendering amputation at knee-joint necessary. The amputation was performed with long anterior and short posterior flap. The posterior flap and connective tissue sloughed deep, the whole leg became erysipelatous, and patient died on 18th day without any hemorrhage. Torsion has been the method employed to arrest hemorrhage in the West Penn Hospital, for the past seven years; and the experience of Dr. McCann and his colleagues in the hospital corresponds with that of Bryant. Dr. McCann has performed torsion in the popliteal, tibial, femoral in the middle thigh, brachial and others, with never any secondary hemorrhage. Thinks torsion is always the preferable method of arresting hemorrhage, but the twisting must be done well—must give five or six complete turns with the forceps.

Dr. A. M. Pollock exhibited a model of a fracture bed which had been used in the case of the father of Dr. J. W. Neely, age 76 years, who had sustained a fracture of neck of femur, and was devised by Dr. Neely. The difficulty in these cases is to have movements of the bowels with as little difficulty as possible. This is an ordinary small bed with mattress, with frame around the top, across which strong canvas is stretched and fastened. This framework is fastened at each side of bed by two strips of wood or iron, in such a manner that the top frame and canvas can be raised, pushed a couple of feet towards foot of bed, and held there until mattress can be removed, or as long as necessary; and beneath the canvas, through which is an opening, a vessel can be placed. For it, is claimed simplicity, efficiency, and cheapness.

Drs. Sutton, Huselton, Wallace and McCann stated that they have seen in use practically the same apparatus for ten or twelve years, under the name of the Leisure Fracture bed.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

(Continued from p. 349.)

Case 5. Cancer of the Rectum. Secondary Cancer of the Liver.

Christian H. was admitted July 5, 1882. He was emaciated, weak and cachectic. He stated that for twenty-seven years he had been perfectly well, but that two months previously he had noticed loss of flesh, and about the same time discovered a growth at the anus which was small, but which gave him a great deal of trouble at stool. Two weeks later he noticed that his feet and legs had become swollen, but it was not till his admission to the hospital that he became aware that there was anything the matter with his abdomen. The patient's father probably died of cancer of the stomach.

The anal growth was excised, and proved to be an adenoid type of malignant disease. Vomiting, dyspnoea and sallowness of the skin increased until his death, five weeks after admission. The autopsy showed that the liver and rectum were the only structures seriously diseased. The liver was enormously enlarged, and filled the whole upper portion of the abdominal cavity. It was slightly adherent to the diaphragm and adjacent viscera, and was studded with cancer nodules varying in size from that of a filbert to that of an egg, often coalescing, and pretty equally distributed over the surface. The whitish color of these nodules was in strong contrast with the dark color of the liver, giving it a variegated appearance. Its weight was 10 pounds, 4½ ounces. The walls of the rectum, six inches from the anus, were infiltrated with the new growth. This was the primary seat of disease. The secondary growth was very rapid, almost entirely painless in itself, and disturbing the patient only by mechanical irritation of the stomach, and the production of oedema and ascites by interference with the circulation. Jaundice did not occur.

Microscopic sections of the anal growth revealed an adenoid growth resembling an aggregation of Lieberkuhn's crypts. It was an example of an early involvement of the part. The growth higher up in the rectum was more advanced, and

illustrated the encephaloid form of the disease. A section from the metastatic deposit in the liver showed a stroma of fibrous tissue with alveoli, lined by epithelial cells, the peripheral cells retaining their columnar shape. It was an example of the reproduction in the liver of the same follicles found in the primary disease of the rectum.

An Unique Specimen of Ossification at the Aortic Orifice.

Exhibited by Dr. J. T. Eskridge.

It was sent him from a distance, and consisted of about one inch of the cardiac end of the thoracic aorta, the aortic semi-lunar valves, and the immediate portion of the heart. The specimen was removed from a man who, aged about seventy, had suffered a number of years from severe heart disease. The walls of the large arteries were thickened, rigid, and contained numerous deposits of inorganic matter. The left ventricle was enormously enlarged. He was unable to obtain any information with regard to the condition of the cardiac valves, other than those of the aortic orifice.

Description of the specimen.—The aorta, where it surrounds the valves for about half an inch in extent, is a hard, unyielding substance of fibrous tissue, and calcified and ossified tissue-matter. The valves in several places are about one-fourth of an inch thick, and seem to have been almost entirely transformed into bone-like material. They are rigid and immovable, and have almost completely cut off all communication between the heart and aorta. One of the leaflets, about three-fourths of an inch in all directions with its vegetations, stretches across the aorta, lies against and is apparently adherent to the other segments of the valves, the latter being curled upon themselves. The central portion of the aorta is entirely occluded, and only two small openings through which the blood could have escaped from the left ventricle are seen between the valvular leaflets near their peripheral attachments. The larger of these holes admits a flattened probe three mm. wide by one thick; the smaller is about two-thirds as large. Three other smaller orifices have existed, but these were obliterated before death by a thin, fibrous, transparent membrane, which is still seen. The valves on the cardiac side are tolerably smooth, but on the aortic side they are very rough, one of the leaflets supporting a vegetation, 10 mm. long. One of the segments of the valves is adherent to the inner coat of the aorta for about half an inch in extent, the free end of the valve being folded upon itself, and pointing toward the nearly closed aortic orifice. After macerating the specimen in water for forty-eight hours, the diseased valves still remain inflexible. Drs. Formad, Dunn, Griffith and Edwards reported having similar, or nearly similar cases. Drs. Tyson and Nancrede called in question the correctness of calling the disease *ossification* of the valves, as it was in reality a *calcification*. Dr. Shakespeare concurred in this view, and thought that ossification rarely, if ever, occurred in this situation.

Dr. Eskridge said that Hayden (*Diseases of the Heart and Aorta*, vol. ii., p. 839), referred to bony deposits in the aorta and its valves, as follows: Sir Dominic Corrigan exhibited before the Pathological Society, of Dublin, (see Proceedings, vol. ii.

new series, Feb. 1864), the heart of a young woman, in which the root of the aorta had undergone complete osteoid transformation; it was likewise greatly dilated, and the aortic valves had been rendered thereby inadequate. During the patient's last illness, a systolic murmur of metallic quality, appropriately designated a "trumpet-bruit," was audible at the base, and in the ascending aorta and carotid arteries; there was likewise a soft diastolic murmur. He regards a "trumpet-bruit" as absolutely diagnostic of bony deposit in the aorta, either in the form of a "rim of bone," or a "projection or tongue of bone." In the same paragraph, Corrigan refers to Dr. Banks' specimen of "a tongue of bone" projecting into the aortic orifice.

Reports of the Committee on Morbid Growths.

"A microscopic examination of a section made from the growth removed from the uterus, and presented by Dr. Parish, December 28, 1882, shows it to be adenomatous in structure, consisting of small cavities or spaces lined with cells, which cavities are separated from one another by fibrillar connective tissue." "A section of the lymphatic gland presented by Dr. Parish, December 28, 1882, shows that its normal structure is metamorphosed into that of a carcinomatous nature, consisting of an alveolar fibrous stroma having the spaces filled with cells of an epitheliomatous type." "Report on Dr. Eskridge's specimen of brain, lung, liver, spleen, kidney, and bladder troubles, presented November 9, 1882. A section made from one of the nodules of the liver, presented by Dr. Eskridge, examined microscopically, shows it to be a new formation consisting of epithelial cells placed in alveolar spaces; the tissue forming the alveolar walls being fibrillar connective tissue. The cells in the spaces at the periphery of the groups, and lying next to the alveolar walls, have a columnar shape, and are quite regularly arranged, while those of the centre are flat or squamous epithelial cells. The neoplasms are cylindrical-celled epithelioma. The post-mortem changes undergone by the brain were such as to prevent any satisfactory histological examination being made.

A Tumor composed of Miliary Tubercles of Subcutaneous Adipose Tissue Connected with one of the Anterior Cutaneous Branches of the Lumbar Nerves.

Exhibited by Dr. Nancrede.

The patient from whom this truly unique tumor was removed was a young girl of 18 years of age, who for four years past had had occasional cough, with at times some bloody expectoration, but was able to attend to her occupation of housework. Her family history was not characteristic in any way. About one year since, she thought that she "strained herself," since when she has been subject to severe attacks of abdominal pain, which extend to various portions of her body. She was admitted to the female medical wards of the Episcopal Hospital last fall, where dullness on percussion and harsh respiration at the apex of one of the lungs was detected. During December, 1882, the pains increased and the right thigh became flexed upon the abdomen. A small, exquisitely sensitive nodulated tumor was now detected just to the outer side of the right rectus abdominis. Dr. Morris J. Lewis, by whose kindness I am en-

abled to present this specimen, then asked me to see the case with him. Under ether I found a nodulated mass, beneath, but attached to the skin, and freely movable upon the deeper parts. I then thought that the growth was one of the ordinary so-called neuromata, i. e., usually fibrous growths in connection with some nerve, and that the pains were reflex, as was also the flexion of the thigh. February 20, 1883, I accordingly removed the growth, which to my surprise was markedly infiltrated, and only at one spot in any sense encapsulated, where it evidently had developed around a small cutaneous nerve and artery. The wound did badly, and has left an indolent ulcer, but all the reflex pains and flexion of the thigh have disappeared, while the lung is breaking down; yet the patient is gaining flesh, and looks and expresses herself as much better, and thoroughly satisfied with the results of the operation. I have termed this growth "unique" because I believe that none such have been reported, i. e., subcutaneous masses of tubercle large enough to require the surgeon's knife, and liable to be mistaken for other neoplasms. The present growth was about an inch in its various diameters, as far as could be estimated. Microscopically, sections show fibrous and adenoid tissue, with giant cells according to the kind report of my friend, Prof. Simes, whose observations have been confirmed by Dr. Formad and other pathologists, as well as by myself.

Dr. G. G. Davis said that he had seen a somewhat similar case related in the clinic of Prof. König, of Gottingen. A young man had a subcutaneous tumor just above and to the outer side of the patella. It was about one inch and a quarter in diameter, and perfectly circumscribed. It and a portion of the joint-capsule, including the part to which it was attached, were excised antiseptically. On the synovial membrane were found a number of what appeared to be miliary tubercles. There were no other evidences of tubercular disease, and he recovered with a good movable joint. Prof. König regarded the case as one of true localized tuberculosis. He examined the excised portion microscopically. The tumor was hard, but had undergone cheesy degeneration.

Dr. Nancrede thought that this interesting case related by Dr. Davis still left his own unique, as Prof. König's case evidently had its origin from the synovial membrane, which was so closely related to the other serous membranes, which, as is well known, are so very prone to miliary tuberculosis.

A section of the growth presented by Dr. Nancrede for Dr. Seltzer, on microscopical examination shows it to consist of an external covering formed of the histological elements and arrangement as found in the skin; the papillae were in places much atrophied and flattened, also in some parts elongated. There were no hair follicles, sweat or sebaceous glands in the section. Below the papillae was seen fibrous tissue, at some points in an active state of proliferation, and numerous blood-vessels. The growth is a fibrous polypus.

—Injection of ice-cold water near the trochanter has cured several cases of obstinate sciatica. Ten drops may be used, repeated if necessary.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Action of Rarefied Air.

From the *Med. Press*, February 14, 1883, we learn that Dr. A. Frankel, of Berlin, read recently an interesting paper on the above subject before the Medical Society of that city. For some time past he, in conjunction with Herr Geppert, has been making investigations into the subject, some of the results of which he made public in the paper above mentioned, and of which the following is a very brief account:

Rarefied air is mainly of moment through the diminished supply of oxygen that necessarily accompanies it. The important effects of such a diminished supply have been observed in cases in which the circulation has been greatly disturbed, in hemorrhages, and in the action of most active poisons, as at least the secondary effect of these is to lessen oxidation. It has long been known that when the supply of oxygen to the body is diminished, the organs become subject to a more or less pronounced degree of fatty degeneration. So long as this is limited to the non-use or storing up of such fat as was already in the system, or brought into the system in the food, the process is not difficult of comprehension. The question becomes a different one, however, when, under the influence of a diminished supply of oxygen, fat makes its appearance in localities in which it is not normally present. Such localities are the muscular structure of the heart, the glandular organs in excessive anæmia, in which, under certain circumstances, the muscular structure completely disappears. The author's efforts had been directed to the solution of this problem. He has found that in case of diminished supply of oxygen, brought about, it may be, in the most diverse ways—by suffocation, or by carbonic oxide (CO) poisoning—the urea, or urinary excretion of nitrogen, undergoes a considerable increase. From this it will appear that the diminished supply of oxygen causes an increased disintegration of structural albumen. The nitrogenous components of the albumen are discharged from the system in the urine, and the non-nitrogenous remain in the form of fat. Recent experiments permit this fact to be proved in a manner to which exception cannot be taken. Dogs were enclosed in a ventilated pneumatic chamber, the air of which was rendered gradually rarer by means of an air-pump. After a time, very characteristic phenomena were observed (already described by P. Bert). If the rarefaction was brought about as slowly as possible, when the atmospheric pressure was reduced to one-third, the animals, without any dyspnea worth naming, fall into a state of somnolence, in which they might remain for some seconds (*Sekundenlang*). In order to ascertain whether this condition, apparently due to the want of oxygen in the brain, might not be really dependent on the mechanical action of the rarefied air on the circulation, the blood pressure was examined. This

showed plainly no deviation from the normal. Neither could there be question of any accumulation of carbonic acid in the blood. It remained, then, that the above-named condition of somnolence was simply the effect of deficiency of oxygen. If the animals, before placing them in the pneumatic chamber, had been fed so carefully that the daily excretion of urea was always the same in amount, it invariably increased considerably on putting them into the chamber and rarefying the air; thus indisputably proving, as Dr. Frankel claims, that the diminished supply of oxygen causes disintegration of structural albumen, with retention of the fatty constituents thereof within the system.

Analyses of Foods.

From the *Chemists' Journal* we take the following:

In a long and interesting article in the *Pharmaceutische Centralhalle* on the nourishing powers of various natural and artificial foods for infants and invalids, Dr. Stutzer, of Bonn, gives the following results as far as concerns their nitrogenous constituents:

FLESH FORMERS.		FLESH FORMERS.	
Per cent.		Per cent.	
Caviar	25.81	Condensed milk . .	8.79
Revalenta	19.93	White bread	7.20
Smoked ham	18.92	Biscuit	6.71
Fresh beef	18.53	Oysters	5.78
Fowl (breast)	16.56	Cow's milk	4.00
White of egg	13.48	Extractum carnis . .	3.40
Yolk	13.01	Malt extract	0.28
Infant's food	9.90		

The above table gives rise to some curious reflections. The wonderful nourishing powers attributed to oysters are found to dwindle into insignificance when compared with other food; for instance, a single hen's egg contains as much nourishment, that is to say, as much flesh-forming material, as fourteen oysters, while one-quarter pound of lean rumpsteak is equal to about five dozen of these delicious, but delusive, molluscs.

With regard to condensed milk, it contains much less flesh-forming material than is generally supposed. Taking four per cent for cow's milk as a fair average, the directions on the can, if followed out, give unexpected results. For children's use, we are told to dilute the condensed milk with four or five parts of water. Taking the lowest figure, we should then have five parts of diluted condensed milk, which, according to Dr. Stutzer's figures, would only contain 1.76 per cent of flesh-formers, instead of four per cent, while the milk sugar would be increased from 4.5 to 10.85 per cent. We know that woman's milk contains more sugar than cow's, but still not in the above surprising proportions. Now that so much canned milk is used for infants brought up by hand, it becomes a question how far mothers who cannot suckle their children are responsible

for the health and even lives of their children, by giving them milk from the tin cow instead of that of the living animal.

Dr. Stutzer further exposes the often exposed superstition about the nourishing powers of beef tea. He extracted all the extractible matter from one hundred grams of beef with one hundred grams of water, and a good proportion of salt, at a gentle heat for four hours; but could only succeed in obtaining in solution one-twelfth of the nourishing matter of the beef, the remaining eleven-twelfths remaining behind in the *bouilli*. In other words, we should have to take half a gallon of beef tea made with a pound of beef to each pint of water, before we got as much nourishment as is contained in a quarter of a pound of steak. We might, it is true, evaporate our beef tea down to, say half a pint, but we doubt if it would be palatable to the least squeamish invalid. The high value of eggs, too, is well shown; in fact, roughly speaking, a couple of eggs weighing three and a half ounces are about equal to two ounces of good rump-steak.

Dr. Stutzer, in the course of this article, mentions three samples of cocoa warranted free from fat (*entölter Cacao*) from different houses, which contained respectively 33.48, 32.31, and 30.95 per cent. of fatty matter of some sort.

The highly nourishing powers of caviar will no doubt strike the "general" with amazement.

With the law of libel in its present condition, we have been obliged to omit names, but Dr. Stutzer either has not the fear of the law before his eyes, or they "order these things"—legally, at least—"better in Germany."

A Case of Neglected Presentation of the Shoulder, in which the Prolapsed Arm was Pretended to be Torn Away by the Lying-in Woman Herself.

The following case is taken from the *Edinburgh Medical Journal*, February, 1883:

(*Centralblatt für Gynäkologie*, No. 43, 1882).—This case is recorded by Dr. Wolezynski of Czernewitz. The patient was confined of her third child, her previous two labors having been normal in every way. She at first had no assistance, and as the pains continued upwards of twenty-four hours, and were very severe and almost unbearable, she states that during one of them she pulled upon the arm which had prolapsed, and tore it off. She then sent for an irregular, and finally for a skilled midwife. The latter, on examination, finding the case too difficult for her, advised to call in Dr. Römer. After prolonged and careful examination, Dr. Römer diagnosed a portion of the thorax presenting and wedged tightly into the pelvis. On the right of the swollen presenting thorax he reached a part where shreds of skin and muscle with portions of ribs could be felt, but no arm. He could also reach by the examining finger close to the neck, but could not get high enough up to decapitate. After closely examining the case he got the parturient woman to confess that the arm had been torn off. He now sent for Dr. Wolezynski to aid him in the management of the case. They agreed that evisceration was the best method to adopt in the circumstances, and succeeded in delivering in that way. The uterus was so tetanically contracted that

they dared not think of turning. It ought to be noted that the labor began on Saturday, and it was not till Monday morning at 8 o'clock that Dr. Römer was called in. The child was a well-developed boy. The right upper extremity was completely wanting, the glenoid cavity of the scapula was laid bare, the skin on the breast and dorsal muscles was retracted, etc. The discharge was very fetid. Notwithstanding this and the fact that the author omitted washing out the interior of the uterus with carbolic solution on purpose, the patient made a good recovery. Dr. Wolezynski's reason for not washing out the interior of the uterus in such cases is somewhat peculiar, viz., that when the room, linen, and entire surroundings of the parturient woman are filthy, in spite of every effort in the direction of cleansing instruments, infection by air is probable. He advised the woman, however, in this case to wash out the *vagina* with a two per cent. solution of carbolic acid. The author comes to the conclusion that it was simply impossible for the lying-in woman to have torn off the arm of her child as she said, as she would have not only required to have pulled upon the prolapsed arm, but to have grasped it above the elbow and dragged it backwards, as there was no sign of injury to the anterior part of the vulva. He believes that the irregular midwife who was first called in had torn off the arm, and that the patient had incriminated herself to screen the other.

Abscess Discharging at the Umbilicus in an Infant.

In the *Boston Med and Surg. Jour.*, February 1, 1883, Dr. C. W. Stickney reports the following case:

When first called to the case, in April last, I found the child suffering evidently from gastrointestinal derangement, manifested, by vomiting of everything taken into the stomach, slight febrile disturbance, thirst, sleeplessness, and constipation. There was some tympanites, but at first no tenderness of the abdomen. The tongue was covered for the most part with a thick, soft, white fur. The child had been troubled more or less with constipation from birth, otherwise had been healthy. Suspecting intestinal obstruction, I administered castor oil, which, however, affected the bowels naturally, thus relieving anxiety in this direction. After two or three days I found on palpation a circular area of induration about three inches in diameter, having the umbilicus as its centre. The umbilicus seemed to rest in a cup-shaped depression in the surface of the tumor; the swelling and induration were accurately defined by an abrupt though somewhat rounded circumference. Very light percussion revealed dullness over the affected region; deep percussion was tympanitic, like the rest of the abdomen. Hop-bags and cloths wrung out of hot water were applied to relieve discomfort. Soon, however, the umbilicus began to push forward as a rounded red tumor, which soon showed distinct fluctuation. Suppuration being now certain, light poultices were applied, and on the sixth day the umbilical tumor ruptured, and discharged a small quantity of healthy pus. Some relief of symptoms followed, but the circular tumor remained in the same condition. Poultices were

continued in the hope of keeping up the discharge, so that eventually the abscess might thoroughly evacuate itself through the external opening, thus lessening the risk of rupture into the peritoneal cavity. Matters now progressed well; there was a constant, free discharge of pus, and the indurated mass was perceptibly softening. But on the morning of the ninth day, while straining to evacuate the bowels, the patient passed suddenly into a state of collapse, and never rallied. An autopsy was not permitted.

When asked for a diagnosis, I gave: Either abscess of the abdominal wall external to the peritonæum, or localized suppurative peritonitis circumscribed by adhesions—death in either case being caused by rupture into the peritoneal cavity.

Pelvic Peritonitis.

Dr. Andrew Semple reports the following case in the *Glasgow Med. Jour.*, February, 1883:

A. F., æt. 22, weaver, admitted 27th December, 1882.

On the 17th of November last, patient gave birth to a living female child; she made an excellent recovery, and in four weeks returned to her work, but after a week she was obliged to confine herself to the house on account of a pain which started in the left iliac region, and gradually extended across the hypogastric to the right iliac region; accompanying the pain were considerable thirst, anorexia, diarrhœa (attributed by patient to a mixture got from a doctor), nausea and vomiting, suppression of milk, and the formation of an abscess in the left breast, which subsequently burst and then healed up.

On admission, these symptoms were still present, with the exception that constipation had taken the place of diarrhœa. Pulse 108, small and wiry; respirations, 28; temperature, morning 100.2°, evening 103.2°; face flushed; tongue furred. The pain in the hypogastrium was relieved somewhat when the thighs were flexed on the abdomen, and aggravated by pressure, even of the bed-clothes. On palpation, in the hypogastric and iliac regions, numerous irregular indurations could be felt all over.

On 29th December twenty-four half-grain powders of *hydrarg. ã creta* were ordered, one every two hours during the day, and every four hours at night. In five or six days afterwards the indurated masses were found to have softened considerably, on the 10th January the powders were repeated as before, and on the 15th the indurations had entirely disappeared, and the patient was perfectly convalescent.

I beg to call the attention of medical men to the method of treatment (detailed above) of an affection whose stubborn resistance to the action of almost any remedial measures has already become proverbial. The exudation into the broad ligaments, etc., was of the usual fibrinous character, and gave the impression to the hand of almost stony hardness. I have found that gray powder in such minute doses is besides a powerful stimulant to the action of the kidneys, even during the nephritis following scarlatina, and, what is somewhat extraordinary, its use in such doses is not contra-indicated in the albuminuria which attends such cases.

Peripheral Vascular Tone.

The *Edinburgh Med. Jour.*, February, 1883, says:

It has been debated whether the vascular wall contains in itself the cause of its own rhythmic contractions, or whether the latter are to be regarded as dependent on a central innervation. Experiment has hitherto pointed to the latter hypothesis as the correct one; but more recently, Luchsinger, after considerable research on the bat's wing, has come to a different conclusion. The veins in the wing of a narcotized bat continued to pulsate powerfully after all the structures (except the afferent and efferent blood-vessels) connecting the wing with the animal's body, had had been divided. Any sympathetic nerve twigs running along the vessels were destroyed by painting the surface with strong ammonia. Further, when, ten minutes after death, defibrinated filtered ox-blood, of the temperature of the room, was passed through a canula into the aorta of an asphyxiated bat from a height of 40-50 cm., the veins filled out and commenced to pulsate, and continued to do so for twenty hours. Luchsinger considers that variations in pressure determine the contractions. If the pressure was zero, the pulsations ceased, although blood or salt solution was still flowing; but if the pressure was raised to 40-50 cm. (water), the veins soon commenced to expand, and the rhythmic play of the vascular wall to show itself. The contraction is due to the irritation caused by the dilatation of the contractile wall. Schiff, also, has recently made similar though independent experiments, and his results correspond with those of Luchsinger (*B. Luchsinger, Pflüger's Archiv.*, 1881, B. 26).—Auerbach, in *Centralb. f. Chirurg.*

The Effect of Salicylic Acid.

The *Am. Pract.* has the following translation from *Berlin klin. Woch.*:

Its ordinary effects are, difficulty in hearing, ringing in the ears, headache, vertigo, drowsiness, and delirium. During fever the temperature is considerably lowered; after a large dose, sometimes profuse sweats occur, then urticaria and erythema, nausea, vomiting, diarrhœa, seldom albuminuria [blood from the kidneys.—Translator]. A few authors mention difficulty in breathing, either a simple dyspnea or hard inspiration, with or without slowness of the same. Dr. Quinke believes the impaired respiration the most common phenomenon of salicylic acid. Its continued use is always accompanied with very hard, but not slow breathing; the frequency never changed in his experiments; also the pulse was not changed. The doses causing such effects were different. Dr. Quinke reports a case having these symptoms, the patient dying from hyperemia of the brain due to the drug, although the dose had been only an ordinary one. The impaired respiration here is similar to that of diabetes, and judging that a certain substance (acetic ether) produced by diabetes be the cause of that phenomenon, and on the other hand that only a small quantity of the salicylic acid could be detected in the organs after death, Dr. Q. believes that a similar substance, and not the drug directly, might produce the impairment of respiration.

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SYPHILIS AND RACHITISM.

At a recent séance of the *Soc. de Chirurgie*, M. Parrot, at the request of M. Verneuil, laid before the society the results of his researches on the near connection binding together these two morbid conditions. Rachitism is the product of syphilis; but syphilis, before arriving at the period when the lesions of rachitism are found, has passed through many intermediary stages, or phases of transition. To determine the syphilitic origin of rachitic lesions is a very difficult matter; it is very rarely that any information can be demanded on so delicate a subject from the parents, and the criterion of diagnosis must be sought for in the traces of syphilitic disease found in the children themselves.

These signs may be ranged under several categories. First come the syphilides found on the skin of the buttocks, thighs, etc. Secondly, various lesions of the viscera are found at the autopsy. A third means of diagnosis, according to M. Parrot, exists in a species of desquamative syphilide of the tongue. Finally syphilis has a special action on the teeth in these children, inducing special lesions of the teeth during both primary and second dentition.

The varieties of these alterations are numerous, the capsular alteration (*alteration en capsule*) found on the anterior and posterior surface of the incisors; the transversal grooving and the cuspidian alteration of the molars; in another form the teeth are eroded at their bases. All these lesions are systematic, and are found in the same order; they may persist during the entire period of life, and are under the dependence of inherited syphilis.

Passing to a complete and thorough examination of the visceral lesions and those affecting the bones, M. Parrot gives a description of the bone lesions, which are always identical, polymorphous, and finally constitute the rachitic condition.

They may be found during the last months of the intra-uterine period, and up to the period of second dentition. Three principal types are observed:

The first is constituted by osteophytes; the

bones are deformed, and the extremities and diaphysis, though intact, are surrounded by hard and friable masses. The tibia and humerus are principally affected.

The second condition is constituted by a species of gelatiniform atrophy. The diaphysis is often found fractured, and there frequently exists what M. Parrot terms a "syphilitic pseudo-paralysis."

The third type is characterized by the appearance of spongoid tissue, or classic rachitism, the extremities of the long bones are affected, and bending and fractures of the bones are found.

These syphilitic lesions have a very near connection with those found daily at the autopsy of rachitic subjects, and it is impossible, in the presence of such evidence, not to conclude that the causes which induced the first alterations also produced those found in the last period. Authors who have studied rachitis have invoked the most diverse causes to explain its origin.

But these causes, alcoholism of parents, prematurity or imperfect nursing at breast, enteritis, bad hygienic conditions, etc., are not sufficient of themselves to produce rickets. The presence of a morbid germ, a constitutional defect, which finds in these special causes and the state of debility they induce a soil proper for its development, is necessary for the proper evolution of the rachitic disease. This germ, this constitutional defect, is congenital or hereditary syphilis.

PHYSICIANS' PRESCRIPTIONS IN THE OLD WORLD.

There has been so much said on the continent about the sale of medical diplomas in the United States, that it has been supposed there generally that American physicians were very ready to resort to any means to increase their profits. The physician is very often suspected of being in collusion with the druggist and of receiving a certain percentage, but it appears that we are yet as infants in this respect, compared with some of our continental confrères.

According to the feuilleton of one of the recent issues of the *Gazette Hebdomadaire*, some of the very respectable physicians of Paris, not satisfied

with prescribing as large a quantity of a medicament as frail human nature is capable of bearing, are careful to place at the head of the prescription, "treatment for two, three, or four months," as the case may be. The patient will be informed at the druggist's that a certain time will be required to fill out the prescription, and that it will be sent to his residence.

The medicaments are received the next day in bottles, in boxes, in baskets; a large quantity, you will say, but, my dear friend, it comprises a four months' course of treatment, and if you are unable to continue it beyond the third day, it is not, most certainly, the fault of our genial friend the doctor, or his very efficient aid, the apothecary.

What can be said of a prescription of this kind ordered by a physician occupying a high official position in Paris in which a "hematogenous wine," figures up to 180 francs; a "ferruginous essence," 80 francs; a "mineral salt," 125 francs; a skin application, 60 francs; arsenical pills, 60 francs; the grand total for the prescription reaching the respectable sum of 700 francs, or 140 dollars.

EVOLUTION.

The doctrine of transformation, man descended from the monkey, the monkey from some inferior animal, and this last from some animal still lower in the scale of beings, descending thus to the original polyp, has been considered exclusively a modern doctrine, perhaps thought of originally by Diderot, but of course principally credited to Darwin.

However, there is nothing new under the sun, and M. Halevy, of the Academie des Inscriptions et Belles-lettres, has found among the works of an individual named Sanconiathon, who lived, according to the savants, precisely between the fourth and twentieth centuries, B. C., the following passage, which was reproduced from the original work by Philon of Byblos, and later by Eusebius: "(Then) there was [on the earth] living beings deprived of intelligence, from whom descended beings gifted with intelligence, who were called Zophasamin, contemplators of heaven."

SANITARY LEGISLATION.

For a wonder, a jobbing bill has been defeated before Councils.

For some time past, a number of prominent physicians have been actively engaged in securing legislation to regulate the plumbing and draining of dwellings.

After preparing a good bill, and resting content that it had been put in the proper channel to reach Councils, they waited; when, to their astonishment, they discovered that a *jobbing* bill had been prepared and presented to the Committee in its place. In many particulars the bills are identical, but in the essential point (the appointing power) which would make the legislation valuable or otherwise, they diverge widely, as the following comparison will show:

JOBGING BILL.

"The Chief Engineer and Surveyor of the City" (a politician) "shall appoint eight inspectors, whose duty, under and subject to his direction, shall be to examine all plumbing and house drainage work, and if the same be in accordance," etc. etc.

PHYSICIANS' BILL.

"Eight District Inspectors shall be appointed by a committee composed as follows: Three physicians, appointed by the County Medical Society; three architects, appointed by the Philadelphia Chapter of the American Institute of Architects; three plumbers, appointed by the Master Plumbers' Association; and three citizens, appointed by the Board of Health."

Comment is unnecessary—the *good* bill is obvious. Suffice it to say that the *jobbing* bill has been defeated, and that when Councils reconvene, the better element will be so strong, that we can reasonably hope for a speedy passage of the worthy ordinance.

NIEMEYER ON THE DEATH OF GAMBETTA.

It is announced that Prof. Niemeyer, in a lecture on the malady and death of Gambetta, affirmed that the illustrious patriot was, like Garfield, the victim of his physicians, and died, not of his wound, but from the effects of the treatment.

The patient, he affirms, had superabundant flesh, and was of a very sanguine temperament, in other words hot-blooded. He was allowed to eat and drink too much, was confined to his room, and deprived of water and air. A more frugal regimen, lighter food, plenty of air, and frequent baths, would have saved Gambetta.

Niemeyer made these assertions and strictures before the medical report appeared, simply from the statements made in the daily journals. It is simply another example of the discourtesy shown by the German physicians towards Garfield's surgeons, and towards Pasteur and his discoveries.

NOTES AND COMMENTS.

The Salicylates and Hæmorrhages in Enteric Fever.

Dr. James Fergusson writes as follows in the *British Medical Journal*, February 17, 1883:

At a time when salicylic acid and its compounds are receiving so much attention, may the following facts be regarded as at least worthy of statement? Last year, while resident in the infirmary here, I had an opportunity of testing the efficacy of certain drugs as anti-pyretics in enteric fever. These agents were used successively, each over a group of cases, and included the salicylate of soda. The latter had not been long in use when an increased frequency of hæmorrhages from the bowel raised the question, "Could the salicylate be favoring the production of that complication of the malady?" Whether it were or not, the suspicion aroused dictated the withdrawal of the salt from use in cases of typhoid. Shortly afterwards, I noticed that a foreign observer had reported the salicylate of bismuth, and, I think, also, salicylic acid (though of the latter I cannot be certain, as I am not able now to find the report in question), to cause intestinal and nasal hæmorrhages. The subject would not have been revived by me at present, but for the recent experience of my successor in the resident's office of the above-mentioned institution, Dr. H. McLean Wilson, who joins me in placing the facts before the readers of this journal. Dr. Wilson, in having recourse to the soda-salt in typhoid, found the same striking frequency of hæmorrhages to follow closely. His employment of the agent differed from mine, in that he administered small doses of ten to fifteen grains frequently over the twenty-four hours, while I gave half drachm or drachm doses at longer intervals apart. In the other respect, however, our experiences have been so similar as to warrant the facts being brought under notice, so that the important practical question involved may, if possible, be decided by the evidence of a number of observers. I hope you may favor such an inquiry.

Instructions to German Midwives.

The following is from the *Medical Press and Circular*:

1. Medical science has, for a number of years past, arrived at the fixed conviction that the great majority of cases of childbed fever depend for their origin upon the inoculation of recent wounds (produced more or less in every case of labor) by putrid (so-called septic) poisons.

2. These poisons readily cling—but in an imperceptible manner—to every kind of utensil that may come into contact with the woman in labor, unless they are kept scrupulously clean.

3. But it is the hands and instruments of the obstetrician that have become known to be especially dangerous bearers and disseminators of the poisons, as it is impossible to avoid bringing these into contact with dangerous putrefying material.

4. Simple, and even repeated, washings with soap and water, as observation has shown, will not remove the poisons that may be clinging to the hands and instruments. The slightest trace of such poison will, however, suffice to set up the gravest—yea, even fatal—childbed fever.

5. Wherefore it is the most sacred duty of every midwife, as of every physician, in other ways so thoroughly to cleanse the hands and instruments, and whatever other appliances may be brought into contact with the patient, that she may not be inoculated by any poisonous matter.

6. We are able, as we learn by observation, to destroy the poison, or, at least, render it powerless, by boiling water, and especially by the stronger solutions of carbolic acid (two to five per cent.).

7. The simple rinsing of the hands in carbolized solutions that are too weak, can afford no protection against childbed fever.

The Treatment of Hepatic Diseases.

Dr. J. Kingston Fowler (*Lancet*, January 20, 1883,) considers that the trocar is preferable to incision for evacuating hepatic abscesses, for the following reasons:

1. The risk from hemorrhage is much less; for when the liver is incised there is often a violent gush of blood. This, it is true, soon ceases; but these patients are usually not in a condition to bear a loss of blood which a distinguished surgeon, Mr. Lister, describes as "alarming."

2. There is less danger from septic absorption along the track of the wound, as the pus flows through a canula or drainage tube.

3. As a trocar of any diameter may be used,

the opening into the sac may be of any size that is considered desirable. For an exploratory puncture I prefer one having a diameter of one-eighth of an inch; but if there is certain evidence of the presence of pus, it is very important to employ an instrument of at least three-eighths of an inch or half an inch in diameter. If a smaller one be used, it is liable to get blocked by the solid shreds of liver tissue which these abscesses so frequently contain.

The Origin of Respiratory Murmurs.

Chomiakoff and Kotovshchikoff having repeated the experiments of Aufrecht and Halbertsma, and completed a series of experimental researches of their own (*Dnevnik Kazan. Obst. Vruchi*, Nos. 13 and 14, 1881), sum up their results as follows:

1. Aufrecht's theory is incorrect; that is, the bronchial respiratory murmur does not in the least depend upon the movements of quiescent air-columns within the lung.

2. The bronchial murmur originates exclusively in the larynx; the friction of the air against the walls of the large bronchi does not give rise to these sounds.

3. The vesicular respiratory murmurs are of a compound nature. A large part of them have a laryngeal origin; that is, the bronchial murmur originated in the larynx, while passing through the normal tissues of the lungs, changes its characters, and is heard on the lung-surface as a vesicular murmur. The remaining part of the vesicular sounds originates on the periphery of the lung, but the authors are not as yet able to elucidate its mechanism.

Double Ovarian Dermoid Cysts.

At a recent meeting of the Academy of Medicine in Ireland (*Dublin Jour. Med. Sci.*, February, 1883), Dr. Poole showed, for Dr. Kidd, two dermoid ovarian cysts removed from an unmarried patient, aged thirty-eight. Growth of tumor noticed for three years. The larger tumor involved the left ovary, and weighed on removal about six pounds. It is composed of numerous loculi of various sizes, some containing glairy mucoid fluid, and others masses of sebaceous matter mixed with hairs. Hard centres of ossification were felt in portion of cyst walls: one of the larger cysts contained a matted mass of long dark hairs, on removing which a mass of bone was found jutting sharply into the cavity, and bearing on its apex two closely-united teeth. The smaller tumor belonged to the right ovary, and is seen to consist of

two cavities, one containing sebaceous matter with a few hairs, and in one part of its walls a mass of bone; the other containing a quantity of light-colored hair, and several teeth irregularly set in a bony wall.

An Account of Two Hundred and Eight Consecutive Cases of Abdominal Section Performed between March 1, and December 31, 1881.

The *Brit. Med. Jour.*, says that Mr. Lawson Tait, F. R. C. S., Eng., Surgeon to the Birmingham and Midland Hospital for Women, in a paper bearing this title, gives the following analysis of the series: Exploratory Incisions, 13 cases, with no deaths; Incomplete Operations, 8 cases, with four deaths. Operations for Cystoma: One Ovary, 36 cases; Both Ovaries, 28; Parovarian Cysts, 12; Hydrosalpinx, 16; Pyosalpinx, 20; or 112 cases, 3 deaths. Removal of Uterine Appendages: for myoma, 26 cases; for Chronic Ovaritis, 12; for Menstrual Epilepsy, 1; or 39 cases, 5 deaths. Hepatotomy for Hydatids, 2 cases; Hydatids of Peritoneum, 2; Cholecystotomy, for Gallstone, 2; Radical of Hernia, 1; Nephrotomy for Hydatids, 1; Nephrectomy, 1; Intestinal Obstruction, 1; Solid Tumors of Ovary, 3; Hysterectomy for Myoma, 10; Cysts of unknown origin, 1; Tumors of Omentum, 1; Pelvic Abscess opened and drained, 7; Chronic Peritonitis, 4; or 35 cases, 4 deaths. Total, 208 cases, with 16 deaths. These operations were not performed under carbolic spray.

Sustained Muscular Effort.

A remarkable instance of sustained muscular effort is given in the *Medical Press* as having occurred in an Australian mine. The drift from one shaft having unexpectedly broken into another, a rapid inundation took place, so that in a few minutes the lower levels were flooded, and the water stood thirty feet in the shaft. Twenty-seven men in one part of the workings were unable to ascend the shaft, being caught in a drift where the water soon rose so high that only by clinging to the timbers could they keep their chins above it. One by one during the terrible sixty hours that elapsed before help came did the men drop off exhausted; but five of them succeeded in holding on during the whole of that time and were brought out alive. The bodies of the other twenty-two were found scattered about on the floor of the drift. Great indeed are the strength and tenacity inspired by desperation, when, they could enable five men to hang on by their hands with their bodies immersed in water for sixty hours.

Orchitis in Typhoid Fever.

In the *Lancet*, December, 1882, p. 994, an article appears noting the rarity of this complication in the older text-books. The orchitis comes on suddenly, does not involve the epididymis, and generally appears at the end of the pyrexial stage or some days after. It is seldom severe, and is never of a neuralgic character; the inflammation is always unilateral, and is more common on the left than on the right side. As a rule, the congestion ends in six to ten days; but sometimes it may go on to suppuration and complete destruction of the organ. Dr. Hamilton (at p. 1039) gives the notes of a case in which an attack of acute pain and swelling of the right testicle came on some days after convalescence commenced. In a short note at p. 1065, Mr. Manly gives his personal experience of an attack of orchitis with (!) phlebitis of both external saphenous veins, which came on during convalescence from a mild attack of typhoid fever.

Compound Fracture of the Femur, with Complications—Recovery.

Dr. Arthur E. Baker describes a case in the *Brit. Med. Jour.* at great length; the patient was a rivetter, aged 29, who fell from a roof and fractured his femur. The case illustrates, in the first place, what is, however, unfortunately rare in experience, namely, the possibility of recovery from pyæmia, even in a patient weakened by a most severe injury, prolonged suppuration, and an attack of erysipelas. Secondly, it illustrates the feasibility in some cases of amputating with the best results through the thigh for compound fracture, leaving a second compound fracture in the neighborhood of the hip-joint to be treated otherwise later on, when the first amputation wound is healed. Thirdly, it shows that, in such a case, it is possible to exarticulate the whole of the remaining bone up to the hip-joint, without re-amputation through the soft parts, but through a moderate opening in the outer side of the stump.

Iodine Blisters in Tabes Mesenterica.

The *Med. Press*, February 14, 1883, says: In tabes mesenterica, Dr. Bouchut, of the Children's Hospital, recommends the application of blisters, or the tincture of iodine, upon the abdomen, and if ascites were present, tapping should be employed without hesitation. The régime to be followed should be very severe—beef-tea, eggs, raw milk, and claret. If diarrhoea be present, enemata of borax, one drachm each time, should be given, and three or four teaspoonfuls of

glycerine in the day, by the mouth. Bismuth, or phosphate of lime, would be very useful. Your correspondent tried this treatment in an apparently hopeless case, and a rapid recovery ensued. The disease was far advanced, and the child was abandoned by its ordinary medical attendant.

Fatal Tetanus Complicating Typhoid Fever.

Dr. Simoneau relates the following: A man, aged sixty-six, was attacked with typhoid fever of rather severe form, and a little irregular in its symptoms. The fever had begun to abate, and the patient was supposed to be entering upon convalescence, when he was suddenly seized with vomiting and pain in the epigastrium. On palpation, a rigidity of the muscles of the right side of the abdomen was noticed. A few days later the muscles of mastication became affected, and the patient developed all the symptoms of tetanus, and died in thirty-six hours. The hygienic surroundings of the patient were of the best, and no cause for the tetanus could be discovered. Dr. Simoneau could find no similar case reported of tetanus complicating typhoid fever.

Hydrotherapy in the Treatment of Syphilis.

The *Med. Record*, February 10, 1883, quoting from the *Jour. de Med. de Paris*, No. 15, 1882, says that Dr. Pascal advocates the employment of cold water, conjoined with the internal administration of specific remedies, in the treatment of syphilis. He states that it is of great service in its early stages, by virtue of its tonic effects, in overcoming syphilitic anæmia. In the later stages, it is employed with advantage in the various cerebral accidents of specific origin. He condemns the thermal baths, however, as tending to cause the very cerebral complications for which the cure is sought. The cold bath alone is of little utility, but should always be regarded as an adjuvant to internal medication.

Chancre on the Chin.

In the *Jour. Cut. and Ven. Dis.*, February, 1883, Dr. Morrow relates the case of a man in whom there was an indurated crateriform typical chancre on the front of the chin, just below the free border of the lips, which had been there for three weeks. The patient ascribed it to a cut from a razor in a barber shop. He has now a general roseola (the chancre having healed), and on the dorsum of the penis, about one inch above the corona glandis, is a small circular non-indurated erosion, with a reddish-white base, covered

with small granulations secreting a small quantity of thin fluid. This has been there three weeks.

Pruritus Vulvæ.

M. Vigier, in the *Gaz. Hebdomadaire*, January 26, gives the following preparations as the best in the treatment of this distressing affection:

1. *Gowland's Lotion*, which contains 15 centigrammes of sublimate to 100 grammes of milk of bitter almonds.

2. *Vidal's Lotion*: this contains 3 or 4 grammes of chloral hydrate to 100 grammes of rose-water. After each application the part to be dusted with starch-powder.

3. *Guéneau de Mussy's Pomade*: Glycérine of starch 20 grammes, subnitrate of bismuth and bromide of potassium aa 1 gramme, calomel 20 centigrammes, and extract of belladonna 25 centigrammes. To be applied every evening to the pruriginous region.

Dangerous Hemorrhage from External Genitals During Labor.

Dr. Peter Young calls attention, in the *Med. Press*, February 14, 1883, to a case in which there was persistent bleeding after the delivery of both child and placenta. Notwithstanding the vigorous application of the usual restoratives, the woman died in a few minutes, and before arrangements could be made to perform transfusion.

On post-mortem examination the source of bleeding was found to be a tear at the upper margin of the vulvar orifice, extending from the left side of the urethra up towards the clitoris. Numerous venous sinuses and two or three small arteries were lacerated.

The Value of the Carbolic Spray.

At a late meeting of the Medico-Chirurgical Society of Edinburgh (*Lancet*), Dr. John Duncan communicated the result of the very important series of experiments which he has been carrying on for the past year, and which seem clearly to show that the carbolic spray is useless as a means of preventing putrefaction in wounds. It is Dr. Duncan's intention to publish his results shortly.

Body Temperature in Different Situations.

Dr. Henry L. Taylor (*New York Med. Record*, Nov. 18, 1882), has found that the difference between the axillary and rectal or vaginal temperature in typhoid fever, while usually about a degree higher in the latter situation, may vary as much as 2° F. sometimes in favor of the axilla, sometimes of the rectum or vagina.

SPECIAL REPORT.

NO. XII.—OPHTHALMOLOGY.

BY CHAS. S. TURNBULL, M. D.

The Following, from the Progress of Ophthalmology During the First Quarter of the Year 1882, by H.

Magnus, Breslau; C. Horstmann, Berlin; A.

Neiden, Bochum, and others, are of Particular Interest.—Archiv. of Ophthalm., vol. xi., No. 3.

(Continued from page 361.)

Teillais. *Tumors of the Orbital Region.* Ann. d'Ocul., January–February, 1882, p. 44. In a man of 32 a cyst developed from the frontal sinus, which dislocated the left eye downward. After its removal, the eye again resumed its normal position; nothing remained but a scar in the supra-orbital region. In a young man of 19 an ivory tumor sprang from the frontal sinus, which dislocated the eye downward. As the tumor had a broad base, it could only be partially removed.

Dor. *Congenital cyst of the orbit.* Microphthalmus, Colobome de l'Iris et de la Choroïde. Rev. Génér. d'Ophthalm., 1882, No. 2, p. 81. Dor describes a congenital cyst of the orbit, which was complicated with microphthalmus; the eye had a coloboma of the iris and choroid.

Eales. *Birmingham Med. Rev.*, January 4, 1882, p. 46. *Pulsating exophthalmus*, with paralysis of 3d, 4th, 5th, 6th, and 7th nerves, and blindness from absolute glaucoma, following severe crush of the head. Probably fracture of petrous bone and rupture of internal carotid. (E. Mettleship.)

Lewkowitch. *Two cases of interstitial keratitis.* Zehender's Monatsbl., vol. xx., p. 12. In a case of gastritis, Lewkowitch observed the occurrence of interstitial keratitis, which grew better or worse according to the state of the former. Iodide of potash cured the whole affection. In another case, interstitial keratitis set in. Here a quotidian intermittent fever was followed by a chronic gastric catarrh.

Pflüger. *Specific parenchymatous keratitis.* Ophthalmic Clinic of Berne University. Rep. for 1880, Berne, 1882, p. 31. As soon as the most severe symptoms of irritation have disappeared, the author advises in specific parenchymatous keratitis the use of a vaseline salve (5%) of the yellow oxide of mercury, gradually increasing its strength to 3%.

Colsmann. *Case of recurrent affection of the cornea in gonorrhœic arthritis.* Berl. Klin. Wochenschr., No. 16. Colsmann observed in a gentleman who was troubled several times with affec-

tions of the joints after gonorrhœa, the appearance of recurrent keratitis.

Cheatham, W. *Inoculation for pannus*, with a case. Amer. Practitioner, February, 1882. The inoculation was made of pure gonorrhœal matter. Before treatment there was but little more than perception of light; after the inflammation had subsided $V = \frac{10}{200}$. (Burnett.)

Pflüger. *Traumatic herpes of the cornea.* Conf. f. c., p. 28. What Pflüger understands by traumatic herpes of the cornea is an eruption of vesicles upon the cornea of elderly people. It has the appearance of ordinary herpes vesicles. All the patients had previously been operated upon. Pflüger, therefore, thinks that the irritation due to the operation is a factor contributing to the development of the disease. The affection lasts from four to fourteen days.

Kroll. *Contributions to the knowledge of neuro-paralytic keratitis.* Centralbl. f. prakt. Augenheilk., 1882, p. 72. Kroll observed in a woman left-sided herpes zoster, conjunctivitis, and opacity of the cornea. The perception of heat and cold was preserved in the affected parts, but perception of pressure and pain lost. There were also paresis of the abducens and considerable dilatation of the pupil. An ulcer developed upon the cornea, making necrosis probable. Iodoform dusted into the eye, combined with a bandage, gradually brought about recovery.

Böckmann, E. *The nature and causes of the corneal affection accompanying anesthesia of the trigeminus.* Bergen, 1882, 163 pages. The author subdivides his treatise into two sections, an experimental and a clinical one. After viewing the most important contributions of others on this subject, he reports the results which he arrived at after about 100 experiments upon cats.

In all essential points they agree with the investigations of Feuer, according to whom the corneal affection developing after intracranial division of the trigeminus must be explained as a xerosis of the cornea and a xerotic keratitis resulting from it. The author lays especial stress upon the importance of repeated and accurate tests of the sensibility of the eye and its adnexa, as in this way only it can be ascertained whether or not the trigeminus has been completely divided. In the clinical part Böckmann describes a xerosis of the cornea and xerotic keratitis which frequently occur among lepers. As these processes, according to the author, are synonymous with so-called neuro-paralytic keratitis, he believes, in opposition to Bull and Hansen, that the latter disease is not rare among lepers. (Bull.)

Blanch. "*Rheumatic periscleritis.*" *Reed. Opth.*, 1882, Nos. 2 and 3. Blanch reports a case of rheumatic periscleritis. It was cured in 6 days by alternate instillations of atropine and eserine, and internal treatment with quinine. (Markwort.)

H. R. *Massage oculaire.* *Annal. de la Soc. Med. Chir. de Liege*, March, 1882. The author discusses massage of the eye according to Pagenstecher's method, and recommends this method of the treatment especially to mild cases of phlyctenular conjunctivitis, and in subconjunctival hemorrhage, which disappears more rapidly when thus treated; it is also useful in hypopyon and hyphæma.

Coomes, Martin F. *Osseous degeneration of the eye.* *Med. Herald*, March, 1882. The degeneration was the result of an inflammation of the uveal tract, occurring during childhood. The hyaloid and choroid were transformed into a bony shell, with an opening corresponding to the optic nerve entrance, with a diameter of one-twentieth of an inch. The anterior portion had points of chalk deposit. (Burnett.)

Goldzieher. *On disseminated choroiditis.* *Wien. Med. Bl.*, No. 10, p. 302, and *Pesth. Med. Chir. Presse.* Meeting of March 4. The author thinks that the genetic and anatomical relation between disseminated choroiditis and retinitis pigmentosa is closer than has heretofore been supposed to be the case, the latter affection being nothing else than a form of chronic plastic choroiditis. The pigment in retinitis pigmentosa originates in the choroid.

V. Hasner. *Case of primary sarcoma of the iris.* *Prag. Med. Wochenschr.*, No. 6, p. 58, 1882. The left eye, which was the affected one, had been injured 15 years ago, and after that slightly several times. The tumor had slowly developed in the upper-outer-quadrant of the iris; its base extended from the periphery of the iris to the edge of the pupil. $V=\frac{1}{2}$. This reduction of the power of vision was probably due to secondary hyperæmia of the choroid and retina. Among 32 cases of sarcoma of the uveal tract, 2 cases only were confined to the iris.

Kipp, J. C. *Two cases of sarcoma of the choroid, presenting unusual clinical features.* *Trans. Amer. Opth. Soc.*, 1881. In both cases the tumor had grown to a considerable size without producing an increase of tension or total detachment of the retina. With the exception of these symptoms, both cases agree with the description of detachment of choroid given in the text-books.

Agnew, C. R., and Webster, D. Report of some cases of glaucoma in which an iridectomy on one eye

seemed to precipitate an attack of acute glaucoma of the other. *Med. News*, vol. xi., No. 8, February 25, No. 476.

Heyl, Albert G. *Acute glaucoma caused by duboisia.* *Amer. Journ. Med. Sci.*, April, 1882. The patient, a woman of 55 years, was already suffering from a simple glaucoma. A two-fifths per cent. solution of duboisia was instilled for dilatation of the pupil for ophthalmoscopic examination. Sub-acute inflammatory glaucoma developed in the course of a few hours, for which an iridectomy was done with a happy result.

Mauthner. *The excavations of the optic nerve.* *Wien. Med. Bl.*, No. 10, p. 300. In this paper the author declares in favor of the theory that glaucoma is a form of serous choroiditis. It is this, and not the increased intra-ocular pressure, which destroys sight, those cases being known to be the worst in which $T=0$. Choroiditis is the primary affection, the increased pressure only a secondary symptom.

Rheindorf. *Case of glaucoma with acute opacity of the lens.* *Zeh. Klin. Monatsbl.*, vol. xx., 1882, p. 15. In a man with incipient senile cataract, acute glaucoma of the left eye developed, which was followed at once by opacity of the lens. The author endeavors to assign the same cause to both affections. The more the zonula is stretched by the increased intra-ocular tension, the less permeable it becomes. Thus the nutrition of the lens suffers, the consequence of which must be the rapid development of cataract.

Wagner. *Statistics of glaucoma* (Min. of the meetings of the Med. Soc. of Odessa, 1881, No. 17) confirms the observations of Benedict, Rosa, Arlt, Ridel-Schmidt, and Kranhals, of the more frequent occurrence of glaucoma among the Jews, and seeks to explain it as a hereditary peculiarity of the race.

Critchett. *Practical remarks on cataract.* *Ophth. Rev.*, vol. 1, No. 4, Feb., 1882, p. 73, continued from p. 26. As regards an operation, the author advises not to operate upon the one until there is a marked diminution of sight in the other. But if symptoms of general constitutional degeneration are observed, it is advisable not to postpone the operation if the cataract is ripe, even though sight in the other eye may be still good, so that the chances of success later may not become worse, and safety be insured to the patients.

Galezowski. *Del influences des iritis et des choroiditis sur le developpement des cataractes.* *Rec'd. Ophth.*, Feb., 1882. The lens is nourished from the aqueous humor. If disease of the uveal tract affects the latter, the nutrition of the lens

suffers. Galezowski discusses the cataracts which result from this; he calls them "choroiditic cataracts," and sub-divides them into four classes.

Choroiditic cataracts, more strictly speaking glaucomatous cataracts; cataracts resulting from detachment of the retina; and cataracts from retinitis pigmentosa, as the latter disease is only due to choroidal changes.

Goldzieher. The relation between opacities of the vitreous and the choroidal affection. *Pesth. Med. Chir. Presse*, March 4, 1882. The vitreous body does not derive its nourishment from the chorio-capillaris, but from the ciliary body; more exactly, from the blood-vessels of the ciliary processes. Inflammations of the former membrane are therefore rarely attended by opacities of the vitreous; of the processes, almost always. In the serous form of choroiditis, which has its most characteristic exponent in specific choroiditis, dense and copious exudations into the vitreous are the rule. The blood-vessels nourishing the vitreous belong to the supra-choroid, and are surrounded by numerous nets of nerves and ganglion cells. The inflammatory process being conducted through these from the ciliary nerves, explains the rapid and extensive nutritive disturbance of the vitreous, as it is observed in sympathetic ophthalmia, when it manifests itself early in the form of dense opacities of the vitreous.

Angelucci. Contribuzione allo studio dell'embolia dell'arteria centrale della retina. *Gaz. Med. di Roma*, March, 1882. *Embolism of both temporal branches of the central retinal artery.* In the upper branch the embolus was situated at the first fork of the artery, close to the edge of the disc; in the lower, a little farther down and beyond the beginning of the nasal branch. The amaurosis had been sudden, and included the whole field of vision except a small triangle outward. Two months later the two arteries could scarcely be traced beyond the emboli. The return of large hemorrhoids and hypertrophy of the left ventricle are assigned as the cause. (Dantone.)

Atken, Chas. *Neuro-retinitis from blow on forehead.* *Brit. Med. Journal*, February 4, 1882, p. 157. Patient was thrown out of trap, fell on right side, and was insensible for six hours. Had vomiting, epistaxis, and severe headache. On fourth day found he could not see with O. D., and was brought to Liverpool Eye Infirmary. He could not read Jaeger 20. Central vision and inner field quite lost. Optic disc and retina extending to outer margin of macula, much swollen and of milk-white color, veins engorged, arteries partially hidden; macula blood-red, apparently

enlarged and triangular in shape, apex inward. No hemorrhages, O. S. normal. Ophthalmoscopic examination made four months later showed the optic nerve white—"remains of pigmental displacement" (sic),—arteries small, veins irregularly narrowed. Region of macula presented "washed-out looking" patches on a deeper red ground. No perception of colors. Perception of light in outer field. No central vision. Muscles all acted normally. Pupil sluggish. Sensation normal. (Fitzgerald.)

Denissenko. *A remarkable case of hemorrhage in the eye.* *Wien. Med. Presse*, No. 1, p. 14. The globe had been squeezed by an impinging piece of wood, producing dislocation of the lens. A peculiar red spot was discovered with the ophthalmoscope at a retinal blood-vessel, which became perceptibly paler when pressure was exerted upon the globe; the blood-vessel, whether artery or vein could not be determined, seemed to enter this spot. Diagnosis: Aneurism or varix of this blood-vessel.

Hirschberg. *On amblyopia from iodoform intoxication.* *Sitzungsber. d. Berl. Med. Ges.*, March 15, 1882. C. f. a., vol. vi, p. 93. In a young girl of 16, upon whom a resection of the hip-joint had been performed, and who had been treated for weeks with iodoform, a central scotoma was observed, the visual field being otherwise normal, and no ophthalmoscopic change visible. V = $\frac{1}{5}$. After removal of the bandage, V rose within eight days to one-half.

Del Monte. *Treatment of detachment of the Retina.* *Atti dell' Ass. Ottalm. Ital.*, Sept., 1881. *Ann d' Ottalm.*, vol. x, 6. Artificial leeching is useless in old cases—in recent ones even injurious. The effects of injections of pilocarpine should not be overrated. In favorable cases the effect becomes apparent after the first injection. (Dantone.)

Schöler. *Cases of hemianopic defects.* *Annual Rep. of his Ophth. clinic for 1881.* Peters, 1882, p. 30. ff. 1. Left sided homonymous hemianopia from syphilis; partial recovery. Diagnosis: gumma between the chiasm and beginning of the optic nerve. 2. Heteronymous temporal hemianopia in a person of 25 with normal field of vision; without any apparent cause, only heredity; no cerebral symptoms. After the use of iodide of potash, slight change in the boundary line of the visual field. Later, incipient atrophy of the optic nerve was observed. 3. Left-sided hemianopia in course of recovery; cause, syphilis. Rapid improvement under inunction.

Weinberg (Hirschberg's clinic) on *Diathetic retinitis.* C. f. A., vol. vi, p. 65. 1. Retinitis in glyco-

suria and albuminuria. In two cases there were very characteristic changes in the fundus. No choked disc, numerous groups of shining white patches, though they did not show any stellate arrangement. 2. Retinitis from chronic lead-poisoning; a, in a type-moulder. Amblyopia of the right eye. Fingers counted at 8. Normal field of vision in both eyes. The ophthalmoscope showed neuro-retinitis, numerous white punctiform spots in the retina, besides minute hemorrhages, perceptible thickening of the walls of the arteries. b, in a porcelain glazer. Diffuse retinitis with central scotoma. (Recovery).

Wood-White (Birmingham). *Embolism of arteria centralis*. Re-establishment of circulation witnessed with the ophthalmoscope. *Ophth. Rev.*, vol. i., No. 3, January, 1882, p. 49. A young man, æt. 31, the morning of his visit to the hospital, perceived a cloud pass before his right eye, and in a few minutes the vision in this eye was totally lost. With the ophthalmoscope the fundus presented the characteristic appearances of embolism of the central artery.

There was not the slightest perception of light. W. made pressure with his finger on the globe for the purpose of ascertaining whether there was any pulsation of the vessels, but without results. On repeating the pressure, he was surprised to see the circulation suddenly re-established. The patient exclaimed that he could see. $V = \frac{2}{3}$. Field of vision slightly contracted in upper part. This continued. Two days later all oedema of retina had disappeared. $V = \frac{2}{3}$. No history of rheumatism, scarlatina, or syphilis. Cardiac examination showed marked impulse and slight systolic bruit at apex. W. thinks it was most probable that the embolus was lodged in the retinal artery at its point of bifurcation, and that not unlikely the pressure applied to the globe may have assisted in dislodging it, and that it passed forward to some peripheral portion of the retina.

Mandelstamm, E. *Injury of both eyes by a pistol-ball*. *C. f. A.*, vol. 6, p. 9. It entered at the right temple, i. e., eyebrow, and passed out at the left temple near the beginning of the hair. Right side, ptosis, diminution of mobility upward and outward. Amaurosis: the ophthalmoscope showed detachment of the retina and rupture of the choroid above. Left side, no paralysis, detachment of the retina, also a rent in the choroid, and a small one below. Fingers counted at 8. Total loss of the sense of smell.

Mayerhausen. *Cases of visual disturbance after injuries of the skull*. *C. f. A.*, vol. 6, p. 44. Fall upon the left supra-orbital region; unconscious-

ness, profuse epistaxis. Four weeks later atrophy of optic nerve, arteries much contracted, veins about normal, amblyopia, scotoma upward and outward. Diagnosis: Fracture of the base of the skull, affecting also the roof of the orbit resp. the optic canal; compression of the inner lower fibres of the optic nerve.

Mengin (de Caen). "*Observations Cliniques*." *Rec. d'Ophth.*, January, 1882. Reports two clinical cases. 1. Detachment of the whole lower half of the retina, due to an injury, complicated with a rent in the cornea, paralysis of accommodation, as well as the sphincter and pupil, and retinal hemorrhage. Recovery in two months. The author advises iridectomy in detachment of the retina from choroiditis in myopia. 2. Foreign body in the choroid—traumatic cataract; a reddish stone visible upon the choroid after extraction, and borne well; $V = \frac{3}{10}$; large scotoma corresponding to the foreign body.

Oeller. *A splinter of wood* (*C. f. A.*, vol. vi., p. 18) 8 mm. long, in the eye for $17\frac{1}{2}$ years without causing any reaction, as it probably had lain parallel to the longitudinal axis of the globe, behind the upper edge of the external rectus; then in consequence of an inflammation it had placed itself at right-angles to its former position, had penetrated the globe, produced irido-choroiditis, and was found when extracted 8-9 mm. behind the outer edge of the cornea, at the upper edge of the external rectus, perpendicular to the longitudinal axis of the globe. Preservation of the globe and some vision.

Buzzard, J. *On ophthalmoplegia externa, in conjunction with tabes dorsalis, with remarks on gastric crises*. *Brain*. April, 1882, pp. 34-35, 1 F., 25, double ophthalmoplegia externa, with partial mydriasis (pupils 4-5 mm.), gastric crises, paroxysmal limb-pains, absence of knee reflex, etc. Syphilis at æt. 17, 2 m., 36. Pains for five years. Decided tabetic symptoms six months, followed by ophthalmoplegia externa, quite complete; deafness and dysphagia. No optic atrophy. Death after attacks of dyspnoea. Neither of the sixth nerves nor L. third nerve could be found; other cranial nerves normal. Atrophy of nerve elements with dilatation, plugging, and rupture of minute vessels, at nucleus of origin of 6th nerve. Advanced degenerative changes in posterior columns of cord. Nuclei of the bulbar nerves normal. (Histological examination by Dr. Brevan Lewis.) Comments on the cases.

Conti thinks he has observed a special form of iritis from malaria in himself and others. *Atti dell. Assoc. Ottalm. Ital.*, September, 1881. *Ann. d'Ottalm.*, vol. x, 6.

Ely, E. T. Illustrative cases of disease of the eye, arising from affections of the teeth. N. Y. Med. Record, March 11, 1882. E. relates the following cases in which he believes the ocular troubles to depend on diseased teeth. Case 1. Paresis of orbicularis muscle, irregular spasm of ciliary muscle, monocular diplopia. Case 2. Paresis of R. int. rect. and ciliary muscles. Case 3. Partial paralysis of 3d nerve. Case 4. Inflammation of conjunctiva and sclera. In all these cases, the eye troubles disappeared immediately on correction of the dental difficulty.

Possadsky. Pathological changes in the retina in some constitutional diseases. Diss., St. Petersburg, 1882, 27 pages. The author reviews his pathological investigations as follows: 1. In all forms of typhoid fever there is hyperæmia of the retina, blood-vessels, and granular opacity of the third, fifth, seventh, and ninth retinal layers (of different intensity in the different kinds of fever). 2. In chronic pneumonia: hyperæmia, hypertrophy of the connective tissue, granular opacity of the third, fifth, and seventh layers, and occasional pigmentation of the stroma and the ganglion cells. 3. In croupous pneumonia: serous infiltration of various parts. 4. In peritonitis: hyperæmia, infiltration of the tissue with white blood corpuscles, and opacity, and swelling of the third, fifth, and seventh layers. 5 and 6. Meningitis and pyæmia, hyperæmia with extravasation blood-corpuscles, infiltration of the tissue, opacity of third, fifth, and seventh layers (less marked in pyæmia). 7. In uræmia: hyperæmia with extravasation, cellular infiltration of the tissue, slight haziness of the nervous elements. When the ureters were ligated: serous infiltration of the retina. 8. In chronic alcoholism: hyperæmia with extravasation and cellular infiltration, hypertrophy of the connective tissue, coarse granular opacity of the third, and fine granular opacity of the fifth and seventh layers. 9. In jaundice from cirrhosis of the liver: hyperæmia, hypertrophy of the connective tissue, and fine granular opacity of third, fifth, seventh, and ninth layers. 10. In pleuritis with pericarditis: no changes in the retina.

Velardi and Rebozzi, who live and practice in malarious regions, have observed ocular affections which could never be brought into direct connection with the miasm. Atti dell' Assoc. Ottalm. Ital., Sep., 1881. Ann. d' Ottalm., vol. x., 6. (Dantone.)

—A quack castrated a man, and afterwards made amends by taking his wife and living with her in open adultery.

CORRESPONDENCE.

EDS. MED. AND SURG. REPORTER:—

I find the following among my clippings from "Notes and Queries," 1857. It may be of interest to your readers.

Surgical Operations under Chloroform, &c.—Has the following passage been "noted" in your pages? If not, it would be curious to non-medical readers, like myself, to know whether opium, or what is supposed to have been made use of more than two hundred years ago by the "old surgeons," "who, ere they show their art, cast one asleep, then cut the diseas'd part," &c.; and whether the use of ether, and subsequently of chloroform, in surgical operations, is merely a revival in these enlightened days of some heretofore forgotten practice of the "dark ages," or whether it is really something new?

Women beware Women, tragedy, by Thos. Middleton, first printed 1657, Act IV., Sc. 1:

"*Hippolito.* Yes, my lord,
I make no doubt, as I shall take the course,
Which she shall never know till it be acted;
And, when she wakes to honour, then she'll thank me for't.
I'll imitate the pities of old surgeons
To this lost limb; who, ere they show their art,
Cast one asleep, then cut the diseas'd part;
So, out of love to her I pity most,
She shall not feel him going till he's lost;
Then she'll commend the cure."

S. H. H.

CHARLES MCSHAINE, M. D.

Charleston, West Va.

NEWS AND MISCELLANY.

Philadelphia Polyclinic.

The Dispensary of the Philadelphia Polyclinic and College for Graduates in Medicine, has in two weeks past treated 397 patients, including nearly 100 surgical cases.

Philadelphia County Medical Society.

At a Clinical Conversational Meeting of the Society held on Wednesday, March 21, 1883, Dr. De F. Willard related a case of impaction of feces, and showed the intestine. Dr. G. W. Vogler exhibited a specimen of aneurism of the arch of the aorta, and a specimen of renal abscess. Dr. R. G. Curtin narrated the particulars of an unusual case of hemorrhagic variola. Dr. E. T. Bruen spoke of a case of phthisis with great local thickening of the pleura, simulating circumscribed pleural effusion. Dr. J. C. Wilson showed strips of membraniform exudation removed from the chest of a child suffering from purulent pleural effusion.

The New York Code.

An association for the purpose of upholding the old code of medical ethics, and resisting any modification of this code that does not emanate from the body in which it originated, has been formed, and held its first regular meeting at the hall of the Academy of Medicine, New York City, on Friday evening, March 23. Among those interested in the movement are such leading men as

Austin Flint, Sr., Austin Flint, Jr., T. Gaillard Thomas, Alonzo Clark, Willard Parker, Thomas M. Markoe, Lewis A. Sayre, Frank H. Hamilton, Isaac E. Taylor, William T. Lusk, Samuel S. Purple, Abram Du Bois, J. W. S. Gouley, John H. Hinton, Stephen Smith, J. Lewis Smith, Jared Linsly, Nathan Bozeman, Henry D. Noyes, Richard H. Derby, F. D. Weisse, J. Williston Wright, Octavius A. White, John G. Adams, and William J. Morton.

University Post-Graduate Instruction.

The post-graduate medical instruction arranged by the medical faculty of the University of Pennsylvania will embrace four courses of eight weeks each. The first or spring course will begin on the 9th of April; the second or fall course will begin on October 1; the third course will begin on December 1; and the fourth course will begin on February 1, 1884.

The post-graduate instruction includes the following branches: Clinical medicine and physical diagnosis, by Professor Pepper and Dr. Bruen. Renal diseases, with practical examination, by Professor Tyson. Nervous diseases and electrotherapeutics, by Dr. S. Weir Mitchell and Dr. Sinkler, at the Orthopedic Hospital. Clinical surgery, by Professor Ashhurst and Dr. White. Ophthalmology, by Dr. S. D. Risley. Dermatology, by Professor Duhring. Otology, by Professor Strawbridge. Gynecology, by Dr. F. B. Baer. Operative surgery, by Dr. White. Clinical and operative obstetrics, by Dr. E. Richardson. Laryngology, by Dr. Seiler. Diseases of children, by Dr. Keating and Dr. Starr. Microscopy and pathology, by Dr. Formad. In addition the classes are permitted to attend the general and special clinics of the University, and such didactic lectures as do not interfere with the post-graduate instruction.

Jefferson Medical College—Alumni Meeting.

The annual meeting of the Alumni Association of Jefferson Medical College took place on Saturday, March 31, when the following officers were elected for the ensuing year: Professor S. D. Gross, President; Drs. Ellwood Wilson, Addinell Hewson, R. J. Lewis, and W. W. Keen, Vice-Presidents; Drs. T. H. Andrews and R. J. Dunglison, Secretaries; Dr. Nathan Hatfield, Treasurer; and Dr. Henry G. Landis, of Columbus, Ohio, Orator.

Dr. J. R. Weist, of Richmond, Ind., delivered the annual address, taking for his subject "The Evolution of a Doctor." At the banquet, a large number of well-known medical men were present. Dr. Weist, together with Professor S. D. Gross, Provost Pepper, of the University of Pennsylvania, and Dr. Nathan L. Hatfield, the oldest living graduate of Jefferson College, as the principal guests of the evening, occupied a small table, the other guests, over 100 in number, not being seated. Among the others present were Professors Henry O. Chapman, Da Costa, Brinton, Pancoast, Bartholow, and Thompson, and Drs. Addinell Hewson, Dunglison, Woodbury, Ellwood Wilson, Andrews, Barton, and A. M. Shaw, of the Middleton Insane Asylum.

A marble bust of the late Professor Joseph Pan-

coast, by Ewing, was presented to the Alumni by Professor William H. Pancoast, and was received on the part of the Association by Professor Gross.

Jefferson Medical College.

The annual commencement of the Jefferson Medical College took place in the Academy of Music on Monday, April 2. At 11:40 a. m., the Trustees, Faculty and graduating class marched in procession from the College to the Academy of Music. After prayer by the Right Rev. Cortlandt Whitehead, D. D., the Hon. James R. Ludlow conferred the degree of Doctor of Medicine upon 227 graduates. The following prizes were then awarded:

1. A prize of \$100, by Henry C. Lea's Son & Co., for the best Thesis, to Charles Pottberg, of New Jersey; with honorable mention of the Thesis of Henry D. Fulton, of Pennsylvania; Henry B. Allen, of Kansas, and Charles L. Weed, of Pennsylvania.

2. The "Robley Dunglison Prize" of \$50, by Dr. Richard J. Dunglison, for the best Essay on the Localization of Cerebral Functions, to Irvine Moore Flinn, of Delaware; with honorable mention of the Thesis of Edward M. Furey, of Pennsylvania.

3. A prize of a Gold Medal, by R. J. Lewis, M. D., for the best report of his Surgical Clinics at the Pennsylvania Hospital, to Moses S. Simpson, of Ohio.

4. A prize of a Gold Medal, by Thomas G. Morton, M. D., for the best report of his Surgical Clinics at the Pennsylvania Hospital, to Emil Hertel, of Delaware; with honorable mention of the Thesis of Henry L. Uhler, of Ohio, and Henry Baldwin, jr., of Ohio.

5. A Case of Instruments, for the best Essay on a subject pertaining to Obstetrics, etc., to John L. Dickey, of West Virginia; with honorable mention of the Thesis of Charles H. Ott, of Pennsylvania.

6. A Gold Medal, for the best Essay on a subject pertaining to the Practice of Medicine, to Orville Horwitz, of Pennsylvania; with honorable mention of the Thesis of Henry W. Johnson and David R. Summy, of Pennsylvania, and Lester C. Pratt, of Ohio.

7. A Case of Instruments, for the best original research in the Chemical Laboratory, to Robert Morrison, of Pennsylvania; with honorable mention of the Essay of Nathan C. Wallace, of Pennsylvania.

8. A Case of Instruments, for the best original research in the Materia Medica Laboratory, to Robert E. Moss, of North Carolina; with honorable mention of the researches of Ripley C. Hoffman, of Iowa, and Randall N. Bartleson, of Pennsylvania.

9. A Case of Instruments, for the best Essay on a subject pertaining to Physiology, to William A. Westcott, of New Jersey.

10. A Case of Instruments, for the best Essay on a subject pertaining to Surgery, to George V. Hale, of Massachusetts; with honorable mention of the Thesis of Samuel Wimpleberg, of New York, and Richard B. Wetherill, of Pennsylvania.

Dr. Addinell Hewson, on behalf of the Alumni, presented to the Board of Trustees a marble bust

of the late Emeritus Professor of Anatomy, Dr. Joseph Pancoast.

The Valedictory address was delivered by Professor J. M. DaCosta.

Items.

—A School of Pharmacy for Women has been opened in Louisville, Ky.

—Dr. Hewson, of London, says that the sparrow may have small-pox and propagate the disease.

—A pharmaceutical association has been formed in the Black Hills, Dakota. The organization has its headquarters at Deadwood.

—A sensible bill has been introduced in the Minnesota Senate, providing for seats for all female employees in factories or stores.

—The leaves of *euphorbia pilulifera*, L., a plant growing in Queensland, are reported to be a sure remedy for asthma and other affections of the chest.

—Traube recommends sugar of milk as a mild and trustworthy laxative, in doses of two or three drachms, dissolved in half a tumbler of warm milk, taken before breakfast.

—A bill has been introduced in the Michigan legislature, providing that the bodies of unclaimed paupers shall not hereafter be sent to the Medical College at Ann Harbor for dissection.

—Dr. Meredith, in the *Birmingham Medical Review*, recommends oil of peppermint as an external application for allaying the neuralgic pain so often complained of in cases of herpes zoster (shingles).

—A busy doctor sent in a certificate of death the other day, and accidentally signed his name in the space for "Cause of death." The registrar says he wishes the profession would be as accurate generally.

—For warts. Prof. Unna recommends the continuous application of mercurial ointment containing five per cent. of arsenic, or a plaster containing in each 0.2 square metre (eight square inches), ten grams (154 gr.) of arsenic, and five grams (77 gr.) of mercury.

OBITUARY NOTICES.

DR. ROBERT H. ARCHER.

Dr. Robert H. Archer died at his residence, in Darlington, Md., on Saturday, March 10, 1883, aged about sixty-nine years. Dr. Archer graduated in medicine from the University of Maryland in 1835, and after practicing in various places, finally settled in Darlington over two years ago, where he has been living and practicing his profession ever since.

Dr. Archer required no death-bed preparation for the ending of life. He lived daily in a constant state of preparation. He was a good man, in every sense of the word.

WILLIAM HOLME VAN BUREN, M. D., LL. D.

Professor William H. Van Buren died in New York City, on March 25, 1883. Born, April 5, 1819, of a line of medical ancestors, in a family

of refinement and education but devoid of wealth, Dr. Van Buren reached a position in the profession of the highest distinction. He entered Yale with the class of '38, but did not graduate; yet the college, in recognition of his literary attainments and distinguished position, decorated him with the honorary degree A. M. in 1866, and later in 1878, conferred upon him the highest title in her gift, LL. D. The University of Pennsylvania, in 1840, graduated him in medicine after his return from a tour in the Paris hospitals. He then served in the army until 1845, in which year he came to New York to assist the late Valentine Mott in the work of his clinique in the medical department of the University of New York. His death was due, indirectly, to apoplexy, which occurred in the spring of 1882; directly, to degenerative changes about the injured cerebral focus, changes which set in with the beginning of the present year. He appreciated the approach of death, and wished for it.

QUERIES AND REPLIES.

MESSERS. EDS.—Was it a violation of the Code of Ethics for Dr. N. to propose to do the jail practice of a community for seventy-five dollars, after ascertaining that this sum was the average cost per annum? If it is, please designate the article or section, and reconcile it with your decision in the case of January 20, 1883. T. T.

Ans.—It was not a violation under such circumstances; it would have been contrary to the spirit of the Code to have offered to attend for a decidedly less sum than previously paid.—EDS. REPORTER.

MARRIAGES.

MONROE—MCUTCHEON.—March 8, by Rev. J. L. Leeper, at the residence of the bride's mother, George M. Monroe, M. D., of New Bristol, Ohio, and Miss Mollie McCutcheon, of Claysville, Pa.

PARKE—SIDEBOTHAM.—On Wednesday evening, March 7, 1883, by Rev. I. Newton Rittner, George T. Parke, M. D., and Mrs. Ella Sidebotham, both of this city.

KETCHAM—ODELL.—In this city, on Tuesday, March 27, at the residence of the bride's parents, by Rev. F. F. Ellenwood, D. D., Dr. T. V. Ketcham, of Stamford, Conn., to Ida B., only daughter of J. D. Odell.

MCCOY—ELLISON.—At Summit Ridge, Del., March 14, by Rev. Irwin Lewis Caton, J. Cresap McCoy, M. D., of New York city, and Lizzie B. Ellison, daughter of Mr. Jonathan Ellison, (deceased).

DEATHS.

GOODRICH.—In Brooklyn, Wednesday, March 28, Charles S. Goodrich, M. D.

HART.—At the residence of his father, in Old Saybrook, Conn., on Thursday, March 29, Dr. George Hart, late of New York city, aged 35 years.

HEADLEY.—In New York, Saturday, March 31, at his late residence, William S. Headley, M. D.

WILCOX.—Dr. M. A. Wilcox, of Halifax county, N. C., one of the oldest physicians in North Carolina, is dead.

KING.—In New-Brighton, S. I., on Sunday evening, March 18, C. Henry King, M. D., physician-in-chief of the Sailors' Snug Harbor, in the 40th year of his age, of pneumonia.

MARTIN.—At Omph-Gibent, Madison county, Ills., on Thursday, March 22, 1883, Dr. Wm. A. Martin, aged 58 years and 20 days.

ARCHER.—In Darlington, Md., Saturday, March 10, 1883, Dr. Robert H. Archer, aged 69 years.